## JVC

## **SERVICE MANUAL**

#### **COLOUR TELEVISION**

AV-28X37SUE, AV-28X37HKE, AV-28X35HKE, AV-28X37HIE, AV-28H35SUE, AV-28H35BUE, AV-28X35HUE

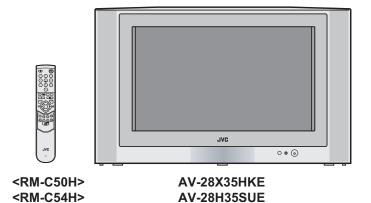
InteriArt

Natural Vision

T-V LINK

**BASIC CHASSIS** 

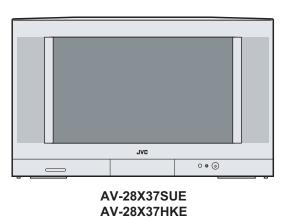
ML



AV-28H35BUE

AV-28X35HUE

<RM-C55H>



AV-28X37HIE

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#### **SPECIFICATION**

Item			Co	ontent	
		AV-28H35SUE AV-28H35BUE	AV-28X37SUE AV-28X35HUE	AV-28X37HKE AV-28X35HKE	AV-28X37HIE
Dimensions (WxHxD)		85.4cm x 50.8cm x 49cm	85.4cm x 50.8cm x 49.3cm		-
Mass		36.3kg	39.0kg		
TV RF System		CCIR (B/G, D/K, I, L/L'	)	CCIR (I)	
Colour System		PAL / SECAM / NTSC	C (Only in EXT mode) PAL		
Stereo System		A2 (B/G, D/K) / NICAM	(B/G, I, D/K, L)	NICAM (I)	
Teletext System				FLOF (Fastext) WST(World standard	system)
Receiving	VHF	47MHz ~ 470MHz		Not avairable	47MHz ~ 470MHz
Frequency	UHF	470MHz ~ 862MHz			
	Frenc CATV	116MHz ~ 172MHz / 22	20MHz ~ 469MHz		-
Intermediate	VIF Carrier	38.9MHz (B/G, D/K, I,	L) / 33.95MHz (L')	38.9MHz (I)	
Frequency	SIF Carrier	33.4MHz (5.5MHz:B/G) / 32.9MHz (6.0MHz:I) / 32.4MHz (6.5MHz:L, I / 40.45MHz (6.5MHz:L'	D/K)	32.9MHz (6.0MHz:I)	
Colour Sub	PAL	4.43MHz		1	
Carrier Frequency	SECAM	4.40625MHz / 4.25MHz	Z		-
	NTSC	3.58MHz / 4.43MHz		3.58MHz	
Power Input		AC220V ~ AC240V, 50	Hz		
Power Consumption	1	185W(Max) / 115W(Av	g), standby : 2.5W		
Aerial Input Termina	al	75ohm unbalanced, coaxial			
Picture Tube		Visible size : 66cm, Measured diagonally H : 58.3cm x V : 33.0cm			
High Voltage		31.0kV (+1kV / -1.5kV) (CRT cutoff, FULL mode)			
Speaker		13cm x 6.5cm oval type x 2			
Audio Power Outpu	t	10W + 10W			
EXT-1 / EXT-2 / EX (Input / Output)	T-3	21-pin Euro connector (SCART socket)			
EXT-4 (Input)	Video	1V(p-p) 75ohm (RCA p	in jack)		
	Audio (L/R)	500mV(rms) (-4dBs), H	500mV(rms) (-4dBs), High impedance (RCA pin jack)		
	S-Video	Y: 1V(p-p) positive (negative sync provided, when terminated with 75ohm) C: 0.3V(p-p) (Burst signal, when terminated with 75ohm)			
AUDIO OUT (Variable)		0~1000mV(rms), Low impedance (RCA pin jack x 2)			
Headphone Jack		Stereo mini jack (Ø3.5r	mm )		
Remote Control Unit		RM-C54H (AAA/R03 di [Exept AV-28H35BUE] RM-C50H (AAA/R03 di [Only AV-28H35BUE]		RM-C55H (AAA/R03	dry battery x 2)

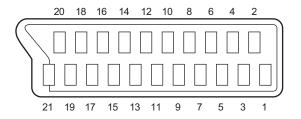
Design & specifications are subject to change without notice.

#### 21-pin Euro connector (SCART): EXT-1/EXT-2/EXT-3

PinNo.	Signal Designation	Matching Value	EXT-1	EXT-2	PinNo.	EXT-3
1	AUDIO R output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)	22	NC
2	AUDIO R input	500mV(rms) (Nominal), High impedance	Used (R1)	Used (R2)	23	Used (R3)
3	AUDIO L output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)	24	Not used
4	AUDIO GND		Used	Used	25	Used
5	GND (B)		Used	Used	26	Used
6	AUDIO L input	500mV(rms) (Nominal), High impedance	Used (L1)	Used (L2)	27	Used (L3)
7	B input	700mV <sub>(B-W)</sub> , 75 ohm	Used	Used	28	Not used
8	FUNCTION SW (SLOW SW)	Low: 0V-3V, High: 8V-12V, High impedance	Used	Used	29	Used
9	GND (G)		Used	Used	30	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)	31	Not used
11	G input	700mV <sub>(B-W)</sub> , 75 ohm	Used	Used	32	Not used
12	SDA		Not used	Used(SDA2)	33	Not used
13	GND (R)		Used	Used	34	Used
14	GND (YS)		Used	Not used	35	Not used
15	R / C input	R : 700mV <sub>(B-W)</sub> , 75 ohm C : 300mV <sub>(P-P)</sub> , 75 ohm	Used (R)	Used (C2/R)	36	Used (C3)
16	Ys input (FAST SW)	Low: 0V-0.4V, High: 1V-3V, 75 ohm	Used	Used	37	Not used
17	GND (VIDEO output)		Used	Used	38	Used
18	GND (VIDEO input)		Used	Used	39	Used
19	VIDEO output	1V <sub>(P-P)</sub> (Negative sync), 75 ohm	Used (TV OUT)	Used (LINE OUT)	40	Not used
20	VIDEO / Y input	1V <sub>(P-P)</sub> (Negative sync), 75 ohm	Used	Used	41	Used
21	COMMON GND		Used	Used	42	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

#### [Pin assignment]



## SECTION 1 PRECAUTIONS

#### 1.1 SAFETY PRECAUTIONS [EXCEPT FOR UK]

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by ( ▲ ) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.

Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ( $\perp$ ) side GND, the ISOLATED (NEUTRAL) : ( $\frac{\bot}{=}$ ) side GND and EARTH : ( $\frac{\bot}{=}$ ) side GND.

Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.).

If above note will not be kept, a fuse or any parts will be broken.

- (5) If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
- (6) The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- (7) Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame

- and connecting the other end of the lead through a  $10k\Omega$  2W resistor to the anode button.
- (8) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced.

Always use the manufacturer's replacement components.

#### (9) Isolation Check

#### (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/ audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

#### a) Dielectric Strength Test

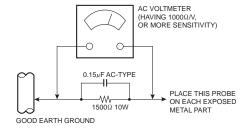
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

#### b) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

#### **Alternate Check Method**

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500 ohm 10W resistor paralleled by a 0.15µF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



#### 1.2 SAFETY PRECAUTIONS [FOR UK]

- (1) The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessary be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (A) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may cause shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubing's, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

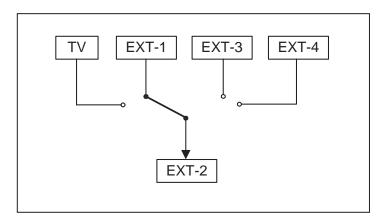
#### **WARNING**

- (1) The equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

## SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

#### 2.1 FEATURES

- New chassis design enable use of an interactive on screen control.
- The TELETEXT SYSTEM has a built-in FASTEXT (UK system), TOP (German system) and WST (world standard system) system.
- Because this TV unit corresponds to multiplex broadcast, users can enjoy music programs and sporting events with live realism. In addition, BILINGUAL programs can be heard in their original language.
- Users can make VCR dubbing of picture and sound by controlling the AV selector to select an optional source at the EXT-2 output shown in figure.



#### 2.2 MAIN DIFFERENCE LIST

⚠	Part Name	AV-28X37SUE AV-28X35HUE AV-28H35SUE AV-28H35BUE	AV-28X37HKE AV-28X35HKE	AV-28X37HIE
$\triangle$	MAIN PWB ASSY	SML-1002A-U2	SML-1902A-U2	SML-1002A-U2
$\triangle$	MICOM&100Hz PWB ASSY	SML0Z001A-U2 [AV-28X37SUE / AV-28X35HUE] SML0Z002A-U2 [AV-28H35SUE / AV-28H35BUE]	SML0Z001A-U2	SML0Z001A-U2
2.5		LC11562-001A-U [AV-28X37SUE] LC11313-008A-U [AV-28X35HUE] LC11313-007A-U [AV-28H35SUE] LC11313-009A-U [AV-28H35BUE]	LC11562-002A-U [AV-28X37HKE] LC11313-008A-U [AV-28X35HKE]	LC11562-002A-U
$\triangle$	REAR COVER	LC11282-001C-U LC11282-002B-U [Only AV-28H35BUE]	LC11282-001C-U	LC11282-001C-U
		RM-C54H-1C RM-C50H-1C [Only AV-28H35BUE]	RM-C55H-1C	RM-C55H-1C

#### 2.3 DISASSEMBLY PROCEDURE

#### 2.3.1 REMOVING THE REAR COVER

- (1) Unplug the power cord.
- (2) Remove the 13 screws [A] as shown in the Fig. 1.
- (3) Withdraw the REAR COVER toward you.

#### 2.3.2 REMOVING THE SIDE CONTROL JACK ASSEMBLY

- Remove the REAR COVER.
  - (1) Remove the screw [B] as shown in the Fig.1.
  - (2) While slightly raise the SIDE CONTROL JACK ASSY, remove the 2 claws under the SIDE CONTROL JACK ASSY.
  - (3) Disconnect the connector [F] and [K] as shown in Fig. 2.

#### 2.3.3 REMOVING THE SIDE CONTROL PWB

- · Remove the REAR COVER.
- · Remove the SIDE CONTROL JACK ASSY.
  - (1) Remove the 3 claws **[C]** from back side of the side control jack assembly as shown in Fig. 2.
  - (2) Pull out the SIDE CONTROL PWB.

#### 2.3.4 REMOVING THE CHASSIS

- Remove the REAR COVER.
  - (1) Slightly raise the both sides of the chassis by hand and remove the 2 claws under the both sides of the CHASSIS from the front cabinet.
  - (2) Withdraw the CHASSIS backward.
    (If necessary, take off the wire clamp, connectors etc.)

#### 2.3.5 REMOVING THE POWER & DEF. PWB

- · Remove the REAR COVER.
- · Remove the CHASSIS.
  - (1) Remove the 3 screws **[D]** as shown in Fig. 1.
  - (2) Remove the POWER & DEF. PWB upper. (If necessary, take off the wire clamp, connectors etc.)

#### 2.3.6 REMOVING THE SIDE SPEAKER

- Remove the REAR COVER.
  - (1) Remove the 2 screws [E], and remove the SPEAKER ADAPTER as shown in Fig. 1.

#### NOTE:

When removing the screws **[E]** of the speaker holder remove the lower side screw first, and then remove the upper one.

- (2) Remove the 4 screws [F] attaching the SPEAKER.
- (3) Follow the same steps when removing the other hand SPEAKER.

#### 2.3.7 REMOVING THE AV TERMINAL BOARD

- · Remove the REAR COVER.
  - (1) Remove the 3 screws [G] as shown in the Fig. 1.
  - (2) Remove the 2 claws **[H]** under the CHASSIS as shown in Fig. 3.
  - (3) Remove the AV TERMINAL BOARD slightly in the direction of arrow [I] as shown in Fig. 3.

#### 2.3.8 CHECKING THE PW BOARD

- To check the back side of the PW Board.
  - Pull out the chassis. (Refer to REMOVING THE CHASSIS).
  - (2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

#### CAUTION:

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

#### 2.3.9 WIRE CLAMPING AND CABLE TYING

- (1) Be sure to clamp the wire.
- (2) Never remove the cable tie used for tying the wires together.
  - Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

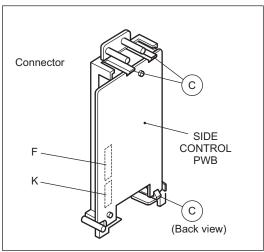


Fig.2

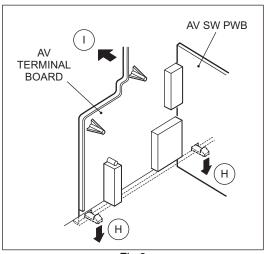
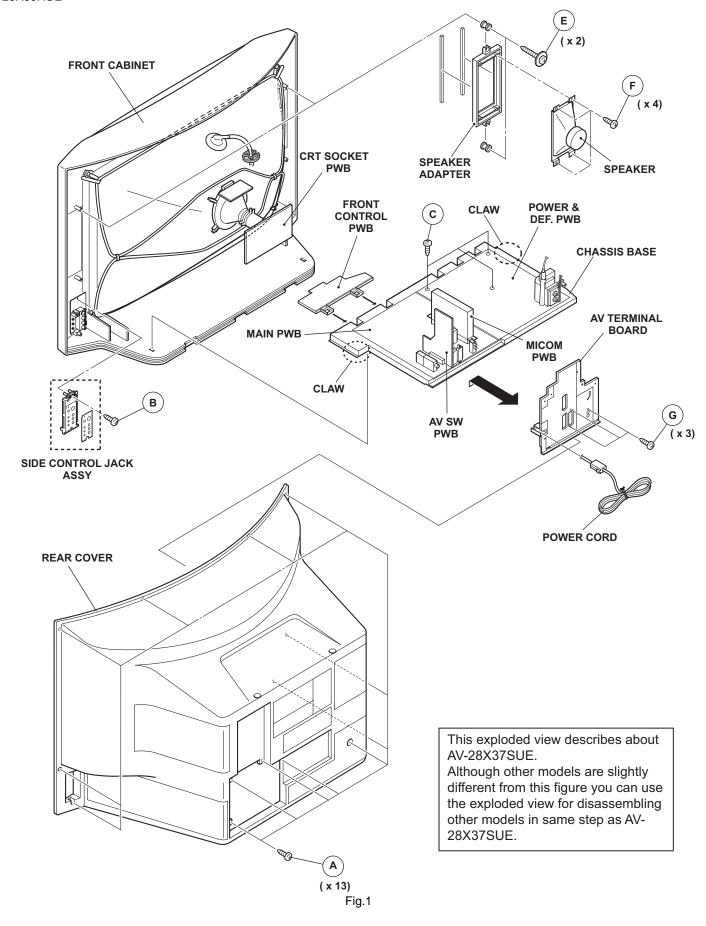


Fig.3



#### 2.3.10 REMOVING THE CRT

#### Note:

- Replacement of the CRT should be performed by 2 or more persons.
- After removing the REAR COVER, CHASSIS etc.,
- (1) Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig. 4).
- (2) While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig. 5.
- (3) Remove 4 screws marked by arrows with a box type screwdriver as shown in Fig. 5.

#### Note:

Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

(4) After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front

surface of the cabinet) shown in Fig. 6.

#### Note:

- The CRT should be assembled according to the opposite sequence of its dismounting steps.
- The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

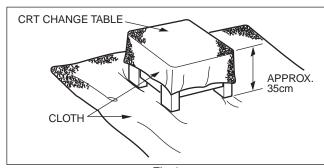


Fig.4

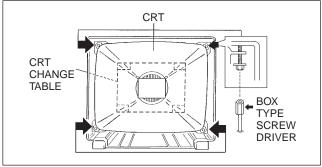


Fig.5

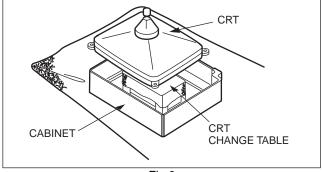


Fig.6

#### 2.4 REPLACEMENT OF MEMORY IC

#### 2.4.1 MEMORY IC

This TV use memory IC. In the memory IC, there are memorized data for correctly operating the video and deflection circuits. When replacing memory IC, be sure to use IC written with the initial values of data.

#### 2.4.2 PROCEDURE FOR REPLACING MEMORY IC

# PROCEDURE 1. Power off Switch the power off and unplug the power cord from the outlet 2. Replace IC. Be sure to use memory IC written with the initial data values.

#### 3. Power on

Plug the power cord into the outlet and switch the power on.

#### 4. Check and set SYSTEM CONSTANT SET:

- \* It must not adjust without signal.
- (1) Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously.
- (2) The SERVICE MENU screen of Fig. 1 will be displayed.
- (3) While the SERVICE MENU is displayed, press the INFORMATION key and MUTING key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed.
- (4) Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION -/+ key.
- (5) Press the MENU key to memorize the setting value.
- (6) Press the INFORMATION key twice, and return to the normal screen.

#### 5. Setting of receive channels

Set the receive channel.

For setting, refer to the OPERATING INSTRUCTIONS.

#### 6. User settings

Check the user setting values of Table 2, and if setting value is different, set the correct value.

For setting, refer to the OPERATING INSTRUCTIONS.

#### 7. Setting of SERVICE MENU

Verify the setting items of the SERVICE MENU of Table 3, and reset where necessary.

For setting, refer to the SERVICE ADJUSTMENTS.

## SERVICE MENU 1. IF 2. V/C 3. AUDIO 4. DEF 5. VSM PRESET 6. STATUS 7. 8. SURROUND 9. SHIPPING (OFF) 0. BUS FREE 1-9 : SELECT i : EXIT

Fig.1



Fig.2

#### NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	(i)
MUTING	×
MENU	(OK)
FUNCTION UP/DOWN	*
FUNCTION -/+	<b>①②</b>

#### 2.4.3 SETTING VALUES OF SYSTEM CONSTANT SET (TABLE 1)

			Setting value		
Setting item	Setting content	AV-28X37SUE AV-28X35HUE AV-28H35SUE AV-28H35BUE	AV-28X37HIE	AV-28X37HKE AV-28X35HKE	
DESTINATION	<b>→</b> EU <b>→</b> EK <b>→</b> EI	EU	El	EK	
CRT TYPE	16:9	16:09	16:09	16:09	
PICTURE TILT	NO	NO	NO	NO	
POWER BASS	→ NO → YES →	YES (X series)	YES	YES	
	NO → YES	NO (H series)			
SPATIAL SURR	→ NO → YES →	YES (X series)	YES	YES	
	NO YES	NO (H series)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 5	
PIC&TEXT	→ NO → YES ─	YES (X series)	YES	YES	
		NO (H series)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	163	
PROGRESSIVE	→ NO → YES ─	YES (X series)	YES	YES	
		NO (H series)	] 153	TES	

#### 2.4.4 USER SETTING VALUES (TABLE 2)

PICTU	RE SETTING	SOU	ND SETTING
PICTURE MODE	BRIGHT	BASS	Center
CONTRAST / BRIGHT	Refer to VSM PRESET	TREBLE	Center
SHARP / COLOUR / HUE		BALANCE	Center
COLOUR TEMP	NORMAL	HYPER SOUND	OFF
PICTUR	E FEATURES	DIGITAL SURROUND	OFF
DIGITAL VNR	AUTO	3D CINEMA S	OUND (Only X series)
DIGIPURE PRO	AUTO (Only X series)	SURROUND	MEDIUM
COLOUR SYSTEM	TV : According to preset CH	BASS BOOST	MEDIUM
	EXT : AUTO	FEATURES	
4:3 AUTO ASPECT	PANORAMIC	SLEEP TIMER	OFF
		BLUE BACK	ON
EXT	SETTING	DECODER (EXT-2)	OFF
ID	BLANK		INSTALL
S-IN	BLANK	LANGUAGE	ENGLISH
DUBBING	EXT-1> EXT-2	AUTO PROGRAM	TV channel automatically set
		EDIT/MANUAL	PRESET CH only
			The others : BLANK

Setting item	Setting value	Setting item	Settir	ng value
1. IF	1. VCO	5. VSM PRESET	BRIGHT/SOFT/STD	COOL/WARM/NOMAL
	2. ATT ON/OFF		1.CONT. 2.BRIGHT 3.SHARP 4.COLOUR 5.HUE	1.WDR R 2.WDR G 3.WDR B
2. V / C	1.RGB BLK 2.CUTOFF R 3.CUTOFF G 4.CUTOFF B 5.WDR R 6.WDR G 7.WDR B 8.BRIGHT 9.CONTRAST 10.COLOUR 11.HUE 12.SHARP 13.SC ADJ. 14.SIDE.P.P 15.SIDE.P.W	6.STATUS (Do not adjust)	VPS PDC	
3. AUDIO (Do not adjust)	1.ERR LIMIT 2.A2 ID THR 3.SYSTEM	8. SURROUND (Do not adjust)	1.CH CONFIG 2.MATRIX 3.REPROTECT IO 4.CENTER MODE 5.SPATIAL EFF 6.VIRTUAL EFF 7.BASS EFFECT 8.HARM 9.HPF 10.LPF 11.AMPLIMIT 12.LEVEL ADJ 13.SWC 14.SW HPF 15.VOLUME 16.HYPEREFFE 17.EFFECT MOD 18.HP-GAIN	
4. DEF.	1.V-SHIFT 2.V-SIZE 3.H-CENT 4.H-SIZE 5.TRAPEZ 6.EW-PIN 7.COR-UP 8.COR-LO 9.COR-UP-S 10.COR-LO-S 11.ANGLE 12.BOW 13.V-S.CR 14.V-LIN	9.SHIPPING (Do not adjust)	ON/OFF	

#### 2.5 REPLACEMENT OF CHIP COMPONENT

#### 2.5.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

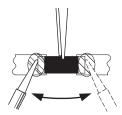
#### 2.5.2 SOLDERING IRON

- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

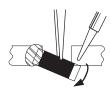
#### 2.5.3 REPLACEMENT STEPS

#### 1. How to remove Chip parts [Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



(2) Shift with the tweezers and remove the chip part.

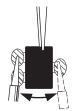


#### [Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

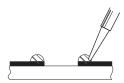


#### Note:

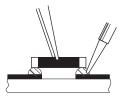
After removing the part, remove remaining solder from the pattern.

### 2. How to install Chip parts [Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

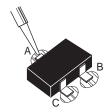


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

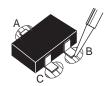


#### [Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



(4) Then solder leads B and C.



## SECTION 3 ADJUSTMENT

#### 3.1 ADJUSTMENT PREPARATION

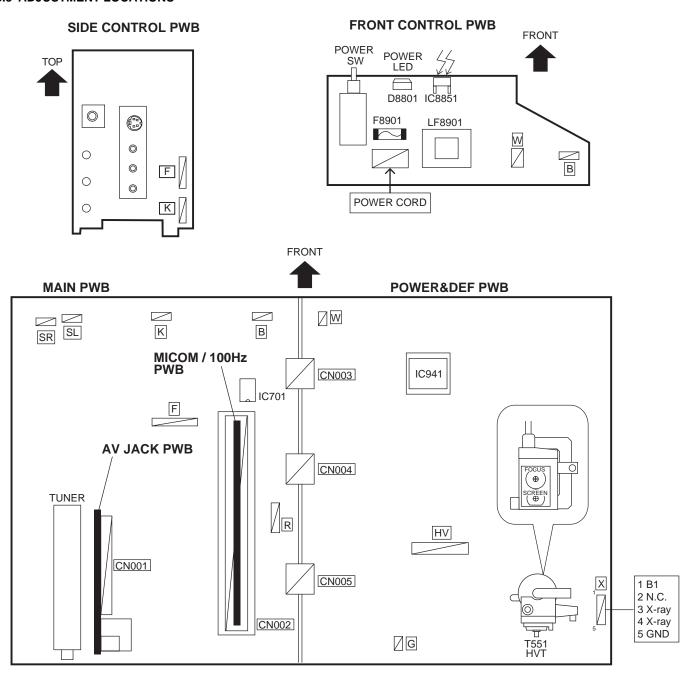
- (1) There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.
- (2) The adjustment using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warning up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
- (7) Preparation for adjustment. Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

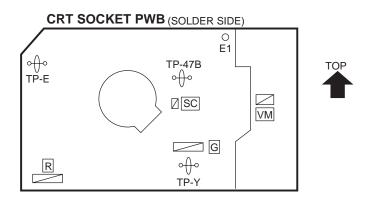
Item	Preset value
PICTURE MODE (VSM)	NORMAL
SLEEP TIMER	OFF
TONE BALANCE	Center
ZOOM	FULL

#### 3.2 MEASURING INSTRUMENT AND FIXTURES

- (1) DC voltmeter (or digital voltmeter)
- (2) Oscilloscope
- (3) Signal generator (Pattern generator: PAL / SECAM / NTSC)
- (4) Remote control unit

#### 3.3 ADJUSTMENT LOCATIONS





#### 3.4 BASIC OPERATION OF SERVICE MENU

#### 3.4.1 TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

#### 3.4.2 SERVICE MENU ITEMS

With the SERVICE MENU, various adjustments can be made, and they are broadly classified in the following items of settings.

1.IF	This mode adjusts the setting values of the IF circuit.
2.V/C	This mode adjusts the setting values of the VIDEO / CHROMA circuit.
3.AUDIO	This mode adjusts the setting values of the multiplicity SOUND circuit.
4.DEF	This mode adjusts the setting values of the DEFLECTION circuit for each aspect mode given below.
5.VSM PRESET	This mode adjusts the initial setting values of COOL, NORMAL and WARM. (VSM: Video Status Memory)

#### 3.4.3 BASIC OPERATION IN SERVICE MENU

#### (1) HOW TO ENTER SERVICE MENU

Press the "INFORMATION" key and the "MUTING" key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig.1 will be displayed.

SERVICE MENU

1. IF 2. V/C
3. AUDIO 4. DEF
5. VSM PRESET 6. STATUS
7. 8. SURROUND
9. SHIPPING (OFF) 0. BUS FREE

1-9: SELECT i: EXIT

Fig.1

#### (2) SELECTION OF SUB MENU SCREEN

Press one of keys 1~5 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3), form the SERVICE MENU.

SERVICE MENU

1. IF

2. V / C

3. AUDIO

4. DEF.

5. VSM PRESET

6. STATUS

7.

8. SURROUND

9. SHIPPING (OFF)

0. BUS FREE

: Do not adjust

#### NAME OF REMOTE CONTROL KEY

NAME OF REMOTE CONTROL RET		
Names of key	Key	
INFORMATION	1	
MUTING	×	
MENU	OK	
FUNCTION UP/DOWN	(\$) (\$)	
FUNCTION -/+	<b>①②</b>	

Fig.2

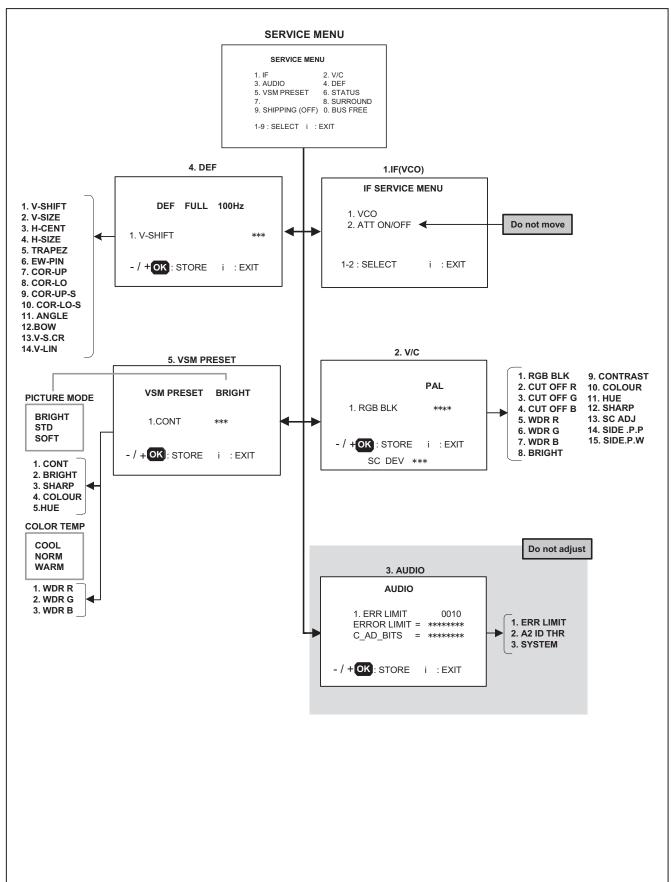


Fig.3 SUB MENU SCREEN

AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28H35BUE AV-28X35HUE

#### (3) METHOD OF SETTING

#### 1) METHOD OF SETTING 1.IF

[1.VCO] : It must not adjust without signal.

Key	Key Function	
(a) [1]	Select 1.IF	
(b) [1]	Select 1.VCO (CW)	
	Make sure that the arrow position between the ABOVE REF and BELOW REF.	
(c) [INFORMATION]	Return to the SERVICE MENU screen.	

#### 2) METHOD OF SETTING 2.V/C, 4.DEF AND 5.VSM PRESET.

Key	Function
(a) [2~5]	Select one from 2.V/C, 3.AUDIO, 4.DEF and 5.VSM PRESET.
(b) FUNCTION UP / DOWN ( ▲/▼ )	Select setting items.
(c) FUNCTION -/+ ( ◀/▶ )	Set (adjust) the setting values of the setting items.
(d) OK	Memorize the setting value.  (Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key if you do, the values will not be stored in memory.)
(e) INFORMATION	Return to the SERVICE MENU screen.

Do not setting 3.AUDIO, 6.STATUS, 8.SURROUND, 9.SHIPPING (OFF) and 0.BUS FREE.

#### (4) RELEASE OF SERVICE MENU

After completing the setting, return to the SERVICE MENU, then again press the INFORMATION key.

#### 3.5 ADJUSTMENTS PROCEDURE

#### 3.5.1 CHECK ITEM

Item	Measuring instrument	Test point	Adjustment part	Description
B1 POWER SUPPLY check	Signal generator DC voltmeter Remote control unit	X connector TP-91(B1) TP-E(J,) [POWER DEF PWB]	[2.V/C] 1.RGB BLK	<ul> <li>(1) Receive a any broadcast.</li> <li>(2) Select the FULL mode.</li> <li>(3) Select 2. V/C from the SERVICE MENU.</li> <li>(4) Select 1. RGB BLK.</li> <li>(5) Press the [function + ( ▶ )] key to find the cut off screen (Black screen).</li> <li>(6) Connect a DC voltmeter to TP-91(B1) and TP-E(⅓).</li> <li>(7) Make sure that the voltage is DC139.9 ±2.0V.</li> <li>(8) Press the [function - ( ◀ )] key to return to service menu.</li> </ul>
HIGH VOLTAGE check	Signal generator HV voltmeter Remote control unit	CRT anode Chassis GND	[2.V/C] 1.RGB BLK	<ul> <li>(1) Receive a any broadcast.</li> <li>(2) Select the FULL mode.</li> <li>(3) Select 2. V/C from the SERVICE MENU.</li> <li>(4) Select 1. RGB BLK.</li> <li>(5) Press the [function + ( ▶ )] key to find the cut off screen (Black screen).</li> <li>(6) Connect a HV voltmeter to CRT ANODE and chassis GND.</li> <li>(7) Make sure that the voltage is DC 31.0kV (+1kV / -1.5kV).</li> <li>(8) Press the [function - ( ◀ )] key to return to service menu.</li> </ul>
1. VC	VCO(CW)	i: EXIT	[1.IF] 1.VCO  Do not move	Under normal conditions, no adjustment is required.  It must not adjust without broadcast signal.  (1) Select 1.IF from the SERVICE MENU.  (2) Then select 1.VCO from the 1.IF.  (3) Receive any broadcast.  (4) Check the arrow (<) position between the ABOVE REF. and BELOW REF.
ABOVE REF JUST REF BELOW REF	←	i: EXIT		

#### 3.5.2 FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	Signal generator		FOCUS VR [In HVT]  FOCUS  SCREEN	<ul> <li>(1) Receive a cross-hatch signal.</li> <li>(2) Select the FULL mode.</li> <li>(3) While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible.</li> <li>(4) Make sure that when the screen is darkened, the lines remain in good focus.</li> </ul>

#### 3.5.3 VSM PRESET ADJUST SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
VSM PRESET setting	Remote control unit		[5.VSM PRESET] (BRIGHT/SOFT/STD) 1. CONT. 2. BRIGHT 3. SHARP 4. COLOUR 5. HUE (COOL/WARM/ NOMAL) 1. WDR R 2. WDR G 3. WDR B	(1) Select STD(standard) of PICTU [MENU] key.  (2) Select 5.VSM PRESET.  (3) Adjust the FUNCTION UP/DOV bring the set values of 1.CONT values shown in the table.  (4) Press the [MENU] key and memoral mode, and make similar adjustres (6) Press the [MENU] key and memoral
				(8) Select 5.VSM PRESET. (9) Adjust the FUNCTION UP/DOV

#### VSM PRESET setting item

	1.CONT.	2.BRIGHT	3.SHARP	4.COLOUR	5.HUE
BRIGHT	+7	0	0	0	0
SOFT	-3	0	-2	0	0
STANDARD	0	0	0	0	0
	1.WDR R	2.WDR G	3.WDR B		
COOL	-15	-9	0		
WARM	+4	0	0		
NOMAL	0	0	0	]	

- URE MODE with the
  - OWN and -/+ key to IT to 5. HUE to the
  - norize the set value.
  - SOFT of PICTURE tment as in 3 above.
- morize the set value.
- MP with the [MENU]
- OWN and -/+ key to bring the set values of 1.WDR R to 3. WDR B to the values shown in the table.
- (10) Press the [MENU] key and memorize the set value.
- (11) Respectively select NORMAL or WARM of PICTURE MODE, and make similar adjustment as in 9 above.
- (12) Press the [MENU] key and memorize the set value.
- Refer to OPERATING INSTRUCTIONS for the PICTURE MODE.

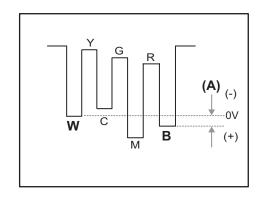
#### 3.5.4 VIDEO CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Setting item (Adjustment item)			Initial setting value		
	2. V/C		PAL	SECAM	NTSC
1.RGB BLK	1.RGB BLK			(OFF)	(OFF)
2.CUTOFF R			100	100	100
3.CUTOFF G			132	132	132
4.CUTOFF B			124	124	124
5.WDR R			165	165	165
6.WDR G			135	135	135
7.WDR B <b>(Do no</b>	ot move)		150	150	150
8.BRIGHT			-30	-30	-30
9.CONTRAST			40	36	36
10.COLOUR			36	31	25 : NTSC 3.58
					0 : NTSC 4.43
11.HUE					2 : NTSC 3.58
					0 : NTSC 4.43
12.SHARP		TV	-2	-2	-2
(Do not move)		EXT	0	0	0
13.SC ADJ. <b>(Do</b>	not move)		18		
14.SIDE .P.P RE (Do not move)	REGULAR	AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28X35HUE	330	330	326
		AV-28H35SUE AV-28H35BUE	322	322	328
	14:9 ZOOM	AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28X35HUE	291	291	284
		AV-28H35SUE AV-28H35BUE	284	284	290
15.SIDE .P.W (Do not move)	REGULAR	AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28X35HUE	1104	1104	1114
		AV-28H35SUE AV-28H35BUE	1096	1096	1106
	14:9 ZOOM	AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28X35HUE	1144	1144	1146
		AV-28H35SUE AV-28H35BUE	1137	1137	1150

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE adjustment	Signal generator Remote control unit		[2. V/C] 2.CUTOFF R 3.CUTOFF G 4.CUTOFF B 5.WDR R 6.WDR G 7.WDR B (Do not move)	Set the PICTURE MODE to NORMAL.  (1) Receive a black and white signal (colour off).  (2) Select 2.V/C.  (3) Each select 2.CUTOFF R, 3.CUTOFF G, 4.CUTOFF B and adjust the screen until the black portion in the screen becomes black.  (4) Each select 5.WDR R, 6.WDR G and adjust the screen until the white portion in the screen becomes white.  NOTE:  Do not adjust 7. WDR B  (5) Press the [MENU] key and memorize the set value.  (6) Change the contrast and brightness from low-light to high-light and check that the tracking of the white balance is good.
SUB BRIGHT adjustment	Remote control unit		[2. V/C] 8. BRIGHT	<ul> <li>(1) Receive any broadcast.</li> <li>(2) Select 2.V/C.</li> <li>(3) Select 8.BRIGHT.</li> <li>(4) Set the initial setting value.</li> <li>(5) If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness.</li> <li>(6) Press the [MENU] key and memorize the set value.</li> </ul>
SUB CONTRAST adjustment	Remote control unit		[2. V/C] 9. CONT.	<ul> <li>(1) Receive any broadcast.</li> <li>(2) Select 2.V/C.</li> <li>(3) Select 9.CONT.</li> <li>(4) Set the initial setting value.</li> <li>(5) If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast.</li> <li>(6) Press the [MENU] key and memorize the set value.</li> </ul>
SUB COLOUR I adjustment	Remote control unit		[2.V/C] 10.COLOUR (PAL/SECAM/NTSC)	[Method of adjustment without measuring instrument] PAL COLOUR:  (1) Receive PAL broadcast. (2) Select 2.V/C. (3) Select 10.COLOUR. (4) Set the initial setting value for PAL COLOUR. (5) If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. (6) Press the [MENU] key and memorize the set value.  SECAM COLOUR: (1) Receive a SECAM broadcast. (2) Make fine adjustment of SECAM COLOUR in the same manner as for above.  NTSC 3.58 COLOUR: (1) Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. (2) Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above.  NTSC 4.43 COLOUR: (1) When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.

Item	Measuring instrument	Test point	Adjustment part	
SUB COLOUR II adjustment	Signal generator	TP-47B TP-E(从)	[2.V/C] 10.COLOUR	I
aujustinent	Oscilloscope	[CRT SOCKET PWB]	(PAL/SECAM/NTSC)	
	Remote control unit	, ,,,		



#### [PAL COLOUR VOLTAGE SETTING]

	AV-28X37SUE AV-28X37HIE AV-28X37HKE AV-28X35HUE AV-28X35HKE	AV-28H35SUE AV-28H35BUE
VOLTAGE (W-B)	+11V	+3V

#### **ISECAM COLOUR VOLTAGE SETTING**

	AV-28X37SUE AV-28X37HIE AV-28X37HKE AV-28X35HUE AV-28X35HKE	AV-28H35SUE AV-28H35BUE
VOLTAGE (W-B)	+6V	+10V

#### [NTSC COLOUR VOLTAGE SETTING]

	All model
VOLTAGE (W-B)	+1V

### [Method of adjustment using measuring instrument] PAL COLOUR:

Description

- (1) Receive a PAL full field colour bar signal (75% white).
- (2) Select 2.V/C.
- (3) Select 10.COLOUR.
- (4) Set the initial setting value of PAL COLOUR.
- (5) Connect the oscilloscope between TP-47B and TP-E(,,,).
- (6) Adjust PAL COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
- (7) Press the [MENU] key and memorize the setting value.

#### SECAM COLOUR:

- (1) Receive a SECAM full field colour bar signal (75% white).
- (2) Set the initial setting value of SECAM COLOUR.
- (3) Adjust SECAM COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
- (4) Press the [MENU] key and memorize the setting value.

#### NTSC 3.58 COLOUR:

- (1) Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal.
- (2) Set the initial setting value of NTSC 3.58 COLOUR.
- (3) Adjust NTSC 3.58 COLOUR and bring the value of (A) in the illustration to the values as shown given billow (Voltage difference between white (W) and blue (B)).
- (4) Press the [MENU] key and memorize the setting value.

#### NTSC 4.43 COLOUR:

(1) When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.

Item	Measuring instrument	Test point	Adjustment part	Description
SUB HUE I adjustment	Remote control unit		[2.V/C] 11.HUE	[Method of adjustment without measuring instrument NTSC 3.58 HUE:  (1) Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal.  (2) Select 2.V/C.  (3) Select 11. HUE.  (4) Set the initial setting value of NTSC 3.58 HUE.  (5) If you cannot get the best hue with the initial setting value, make fine adjustment until you get the best hue.  (6) Press the [MENU] key and memorize the set value.  NTSC 4.43 HUE:  (1) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
SUB HUE II adjustment	Signal generator Oscilloscope Remote control unit	TP-47B TP-E(;;) [CRT SOCKET PWB]	[2.V/C] 11.HUE	[Method of adjustment using measuring instrument]  NTSC 3.58 HUE:  (1) Input a NTSC 3.58MHz COMPOSITE VIDEO signa  (full field colour bar with 75% white) from the EXT  terminal.  (2) Select 2.V/C.
	W C	G R B B	(B) (-) OV	(3) Select 11. HUE. (4) Set the initial setting value of NTSC 3.58 HUE. (5) Connect the oscilloscope between TP-47B and TP E( ) (6) Adjust NTSC 3.58 HUE to bring the value of (B) in the illustration to the values as shown given billow (voltage difference between white (W) and magenta (Mg)). (7) Press the [MENU] key and memorize the setting value.  NTSC 4.43 HUE: (1) When NTSC 3.58 COLOUR set, NTSC 4.43 COLOUR will automatically set.
		AV-28X37SUE AV-28X37HIE	AV-28H35SUE AV-28H35BUE -10V	

#### 3.5.5 DEFLECTION CIRCUIT ADJUSTMENT

There are 4 aspect modes (1.FULL, 2.PANORAMIC, 3.SUBTITLE, 4.COMPRES) of the adjustment.

Depending upon the kind of signals ( Vertical frequency 100Hzi / 60Hzp: AV-28X37SUE/AV-28X37HIE/AV-28X37HKE/AV-28X35HUE/ AV-28X35HKE, 100Hzi / 120Hzi: AV-28H35SUE/AV-28H35BUE).

100Hzi is a signal that is output to a screen when a 50Hz signal is input to a television set. It is an interlace-scanned picture of 100Hz. 60Hz p is a signal that is output to a screen when a 60Hz signal is input to a television set. It is a progressive-scanned picture of 60Hz. (X series only)

120Hz i is a signal that is output to a screen when a 60Hz signal is input to a television. It is an interlace-scanned picture of 120Hz. (H series only)

- When the 100Hz FULL mode has been established, the setting of other modes will be done automatically.
   However, if the picture quality has not been optimized, adjust each mode again, respectively.
- The adjustment using the remote control unit is made on the basis of the initial setting values.
- The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

#### Initial setting value (AV-28X37SUE/AV-28X37HIE/AV-28X37HKE/AV-28X35HUE/AV-28X35HKE)

Mark []: Fixed value

		Initial setting value							
Setting item	Adjustment name	FULL		PANORAMIC		SUBTITLE		COMPRESS	
		100Hzi	60Hzp	100Hzi	60Hzp	100Hzi	60Hzp	[100Hzi]	[60Hzp]
1. V-SHIFT	Vertical center	0000	0000	0000	0000	0000	0000	[0000]	[0000]
2. V-SIZE	Vertical height	-032	0000	0000	0000	0000	0000	[-040]	[0000]
3. H-CENT	Horizontal center	-014	0000	0000	0000	0000	0000	[0000]	[0000]
4. H-SIZE	Horizontal width	0000	0000	0000	0000	0000	0000	[0000]	[0000]
5. TRAPEZ	Trapezoidal distortion correction	-005	0000	0000	0000	0000	0000	[0000]	[0000]
6. EW-PIN	Side pin correction	-035	0000	0000	0000	0000	0000	[0000]	[0000]
7. COR-UP	Corner Pin correction Up side	0000	0000	0000	0000	0000	0000	[0000]	[0000]
8. COR-LO	Corner Pin correction Low side	-005	0000	0000	0000	0000	0000	[0000]	[0000]
9. COR-UP-S	Corner pin correction UP	0000	0000	0000	0000	0000	0000	[0000]	[0000]
10. COR-LO-S	Corner pin correction LOW	0000	0000	0000	0000	0000	0000	[0000]	[0000]
11.ANGLE	Angle correction	002	0000	0000	0000	0000	0000	[0000]	[0000]
12.BOW	Bow-shaped distortion correction	0000	0000	0000	0000	0000	0000	[0000]	[0000]
13.V-S.CR	Vertical height correction	[0003]	[0000]	[0005]	[0000]	[0000]	[0000]	[0000]	[0000]
(Do not adjust)									
14.V-LIN	Vertical Linearity	-007	0000	[-004]	[0000]	[0000]	[0000]	[0000]	[0000]
(Do not adjust)									

#### Initial setting value (AV-28H35SUE/AV-28H35BUE)

Mark[]: Fixed value

		Initial setting value					
Setting item	Adjustment name	FULL		PANO	RAMIC	SUBTITLE	
		100Hzi	120Hzi	100Hzi	120Hzi	100Hzi	120Hzi
1. V-SHIFT	Vertical center	0000	0000	0000	0005	+005	0000
2. V-SIZE	Vertical height	-033	0000	0005	0017	+001	0000
3. H-CENT	Horizontal center	-014	0000	0000	0000	0000	0000
4. H-SIZE	Horizontal width	0000	0000	0000	0000	0000	0000
5. TRAPEZ	Trapezoidal distortion correction	-011	0000	0000	0000	0000	0000
6. EW-PIN	Side pin correction	-035	0000	0000	0000	0000	0000
7. COR-UP	Corner Pin correction Up side	0000	0000	0000	0000	0000	-008
8. COR-LO	Corner Pin correction Low side	0000	0000	0000	0000	0010	0000
9. COR-UP-S	Corner pin correction UP	0000	0000	0000	0000	0000	0000
10. COR-LO-S	Corner pin correction LOW	0000	0000	0000	0000	0000	0000
11.ANGLE	Angle correction	0000	0000	0000	0000	0000	0000
12.BOW	Bow-shaped distortion correction	0000	0000	0000	0000	0000	0000
13.V-S.CR	Vertical height correction	[0003]	[0000]	[0005]	[0000]	[8000]	[0000]
(Do not adjust)							
14.V-LIN	Vertical Linearity	0000	0000	[-004]	[0000]	[-008]	[0000]
(Do not adjust)							

#### NOTE:

- Do not adjust PANORAMIC & SUBTITLE mode.
- At first the adjustment in 50Hz FULL mode should be done, then the data for the other aspect mode is corrected in the respective
  value at the same time. And confirm the deflection adjustment initial setting value in 60Hz (NTSC EXT mode) FULL mode. If the
  adjustment in 50Hz each aspect mode has been done and stored, the data for the same aspect modes in 60Hz is corrected in
  the respective value. Only the data for the other aspect mode in 60Hz is corrected for itself.

Item	Measuring instrument	Test point	Adjustment part
V.POSITION adjustment	Signal generator		[4.DEF] 1.V- SHIFT
	Remote control unit		



 Receive a circle pattern signal of vertical frequency 50Hz.

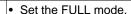
Description

- (2) Select 4.DEF.
- (3) Select 1.V-SHIFT.
- (4) Adjust vertical position to make A = B.
- (5) Check the adjustment value above in other zoom mode. If it is a wrong adjustment, re-adjust in FULL mode and adjust by 1.V-SHIFT.
- (6) Press the [MENU] key and memorize the set value.

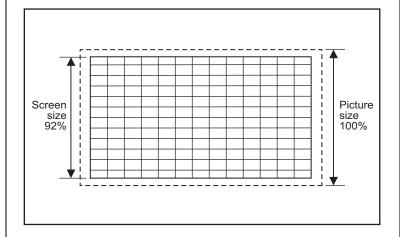
	<u>A</u>
	<u></u>
	<u>B</u>

V.SIZE Signal [4.DEF]
adjustment generator 2.V-SIZE

Remote control unit



- (1) Receive a cross-hatch signal.
- (2) Select 2.V-SIZE and set the initial setting value.
- (3) Adjust to make sure that the vertical screen size of the picture size is in the bellow table.
- (4) Make sure that the vertical screen size of the each ASPECT mode is in the below table.
- (5) Press the [MENU] key and memorize the set value.
- (6) Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the vertical screen size is in the table below.
- (7) Press the [MENU] key and memorize the set value.



#### [SCREEN SIZE]

ASPECT MODE	FULL	PANORAMIC	SUBTITLE
SCREEN TOP	92%	87%	70%
SCREEN BOTTOM	92%	87%	83%

Item	Measuring instrument	Test point Ad	djustment part	Description
H. POSITION adjustment	Signal generator  Remote control unit	[4.DE 3.H-C	EF] CENT	Set the FULL mode.     (1) Receive a circle pattern signal.     (2) Select 3.H-CENT and set the initial setting value.     (3) Adjust horizontal position to make C=D.     (4) Press the [MENU] key and memorize the set value.
	C	D		
H.SIZE adjustment	Signal generator Remote control unit	[4.DE 4.H-S		Set the FULL mode.  (1) Receive a circle pattern signal.  (2) Select 4.H-SIZE and set the initial setting value.  (3) Adjust to make sure that the horizontal screen size of the picture size is in the bellow table.
[SCREEN SIZE]	_	1		<ul> <li>(4) Make sure that the horizontal screen size of the each ASPECT mode is in the below table.</li> <li>(5) Press the [MENU] key and memorize the set value</li> <li>(6) Input a NTSC VIDEO signal (60Hz) from the EX</li> </ul>
H SIZE	E FULL 92%	PANORAMIC 95%	SUBTITLE 92%	terminal, and make sure that the horizontal scree size of the each ASPECT mode is in the below table (7) Press the MENU key and memorize the set value.
SIDE-PIN adjustment	Signal generator  Remote control unit	[4.DE 6.EW		Set the FULL mode.     (1) Select 6.EW-PIN and set the initial setting value.     (2) Adjust to make the 2nd vertical lines at the left and right edges of the screen straight. Also make sure that the 3rd vertical lines are straight.     (3) Press the [MENU] key and memorize the set value.
	Str	aight		

Item	Measuring instrument	Test point	Adjustment part	Description
TRAPEZIUM adjustment	Signal generator Remote control unit		[4.DEF] 5.TRAPEZ	Set the FULL mode. (1) Receive a cross-hatch signal. (2) Select 5.TRAPEZ. (3) Set the initial setting value of 5.TRAPEZ. (4) Adjust to bring the vertical lines at the right and left edges of the screen parallel. (5) Press the [MENU] key and memorize the set value.
	<b>←</b> :	Parallel		
CORNER adjustment	Signal generator Remote control unit		[4.DEF] 7.COR-UP 8.COR-LO 9.COR-UP-S 10.COR-LO-S	Set the FULL mode. (1) Select 7.COR-UP. (2) Set the initial setting value of 7.CORUP. (3) Adjust to bring the straight line at the upper corner. (4) Select 8.COR-LO. (5) Set the initial setting value of 8.COR-LO. (6) Adjust to bring the straight line at the low corner.
	Straight		Straight	<ul> <li>(7) Press the [MENU] key and memorize the set value.</li> <li>(8) If the extreame upper &amp; lower corners are a little pir or barrel chose 9.COR-UP-S or 10. COR-LO-S and adjust.</li> <li>(9) Press the [MENU] key and memorize the set value.</li> </ul>
ANGLE	Signal		[4.DEF]	In case where there is a parallelogrammical distortion of
adjustment	generator  Remote control unit		11. ANGLE	images on the screen.  • Set the FULL mode.  (1) Select 11.ANGLE.  (2) Adjust to bring the vertical lines straight.  (3) Press the [MENU] key and memorize the set value.
		Bring the	vertical lines straight.	

Item	Measuring instrument	Test point	Adjustment part	Description
BOW adjustment	Signal generator Remote		[4.DEF] 12.BOW	<ul> <li>In case where there is a bow-shaped distortion of images on the screen.</li> <li>Set the FULL mode.</li> <li>(1) Select 12.BOW.</li> </ul>
	control unit			<ul> <li>(2) Adjust to bring the vertical lines straight.</li> <li>(3) Press the [MENU] key and memorize the set value.</li> </ul>
		Bring the v	ertical lines straight.	
V.S-SHAPE CORRECTION & V.LINEARITY adjustment	Signal generator  Remote control unit		[4.DEF] 13.V-S.CR 14.V-LIN	<ul> <li>When the vertical linearity has been deteriorated remarkably, perform the following steps.</li> <li>Set the FULL mode. <ul> <li>(1) Receive a cross-hatch signal.</li> <li>(2) Select 14.V-LIN.</li> </ul> </li> </ul>
			TOP  TOP  CENTER  BOTTOM	<ul> <li>(3) Set the initial setting value of 14.V-LIN.</li> <li>(4) Select 13.V-S.COR.</li> <li>(5) Set the initial setting value of 13.V-S.COR.</li> <li>Adjust 14.V-LIN and 13.V-S.COR so that the spaces of each line on top, center and bottom become uniform.</li> </ul>

#### 3.5.6 AUDIO CIRCUIT ADJUSTMENT

• Do not touch **3. AUDIO** adjustment of the SERVICE MENU as it requires no adjustment. If values had changed for the some reason, set the initial values in the following table.

#### 3. AUDIO (Do not adjust)

Setting item	Variable range	Fixed value
1. ERR LIMIT	000H~FF0H	100H
2. A2 ID THR	00H~FFH	19H
3. SYSTEM	0000H~7FFFH	

AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28H35BUE AV-28X35HUE



AV & MULTIMEDIA COMPANY DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

## JVC

## SCHEMATIC DIAGRAMS

#### **COLOUR TELEVISION**

AV-28X37SUE, AV-28X37HKE, AV-28X35HKE, AV-28X37HIE, AV-28H35SUE, AV-28H35BUE, AV-28X35HUE

CD-ROM No.SML200305

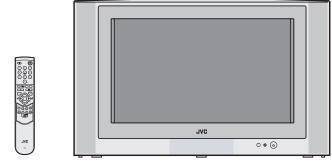
InteriArt

Natural Vision

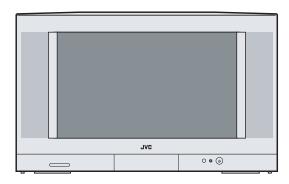
T-V LINK

**BASIC CHASSIS** 

ML



<RM-C50H> <RM-C54H> <RM-C55H> AV-28X35HKE AV-28H35SUE AV-28H35BUE AV-28X35HUE



AV-28X37SUE AV-28X37HKE AV-28X37HIE :B2 (12V)

:Wrapping or soldering

## AV-28X37SUE, AV-28X37HKE, AV-28X35HKE, AV-28X37HIE, AV-28H35SUE, AV-28X35HUE, AV-28H35BUE STANDARD CIRCUIT DIAGRAM

#### ■ NOTE ON USING CIRCUIT DIAGRAMS

#### 1.SAFETY

The components identified by the \( \triangle \) symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

#### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal : Colour bar signal

(2) Setting positions of each knob/button and

(5) Voltage values

variable resistor : Original setting position

when shipped

(3)Internal resistance of tester :DC 20kΩ/V

(4)Oscilloscope sweeping time :H ⇒ 20µs/div

:V ⇒ 5ms/div

:Others  $\Rightarrow$  Sweeping time is

specified :All DC voltage values

\* Since the voltage values of signal circuit vary to some extent

#### 3.INDICATION OF PARTS SYMBOL [EXAMPLE]

• In the PW board :R1209  $\rightarrow$  R209

#### 4.INDICATIONS ON THE CIRCUIT DIAGRAM (1)Resistors

Resistance value

No unit  $\begin{array}{cc} : \left[ \ \Omega \ \right] \\ \mathsf{K} & : \left[ \mathsf{k} \ \Omega \ \right] \\ \mathsf{M} & : \left[ \mathsf{M} \ \Omega \ \right] \end{array}$ 

Rated allowable power

No indication :1/ 16 [W]
Others :As specified

Type

No indication :Carbon resistor

OMR :Oxide metal film resistor

MFR :Metal film resistor

MPR :Metal plate resistor

UNFR :Uninflammable resistor

FR :Fusible resistor

\* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

#### (2)Capacitors

Capacitance value

1 or higher :[pF]
less than 1 :[μF]

■ Withstand voltage
No indication :DC50[V]

TO Indication .DC50[v]

Others :DC withstand voltage [V]
AC indicated :AC withstand voltage [V]

\* Electrolytic Capacitors

47/50[Example]:Capacitance value [µF]/withstand voltage[V]

Type No indication :Ceramic capacitor MM :Metalized mylar capacitor :Polypropylene capacitor MPP :Metalized polypropylene capacitor MF :Metalized film capacitor TF :Thin film capacitor ΒP :Bipolar electrolytic capacitor TAN :Tantalum capacitor (3)Coils [H4]: No unit :As specified Others (4)Power Supply :9V □□□□ :5V \*Respective voltage values are indicated (5)Test point :Test point :Only test point display (6)Connecting method

(7)Ground symbol

:Connector

:Receptacle

#### **5.NOTE FOR REPAIRING SERVICE**

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ( $\bot$ ) side GND and the ISOLATED(NEUTRAL) : ( $\beth$ ) side GND.Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

 Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

#### NOTE

Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28X35HUE AV-28H35BUE

#### **CONTENTS**

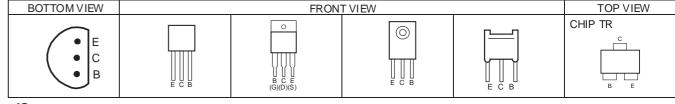
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#### USING P.W. BOARD

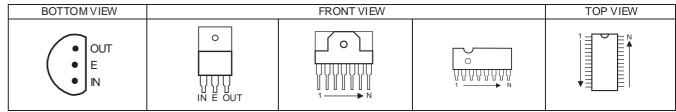
P.W.B ASS'Y	AV-28X37SUE	AV-28X37HKE	AV-28X35HKE	AV-28X37HIE	AV-28H35SUE	AV-28H35BUE	AV-28X35HUE
MAIN PWB	SML-1002A-U2	SML-1902A-U2	←	SML-1002A-U2	←	←	←
POWER & DEF PWB	SML-2002A-U2	←	←	←	←	<b>←</b>	←
100Hz PWB	SML0Z001A-U2	←	←	←	SML0Z002-U2	←	SML0Z001A-U2
CRT SOCKET PWB	SML-3002A-U2	←	←	←	←	←	←
FRONT CONTROL PWB	SML-8001A-U2	←	←	←	←	←	←
SIDE CONTROL PWB	SML-8101A-U2	←	←	←	←	←	←
AV JACK PWB	SML0J001A-U2	←	←	<b>←</b>	←	←	←

#### SEMICONDUCTOR SHAPES

#### **TRANSISTOR**



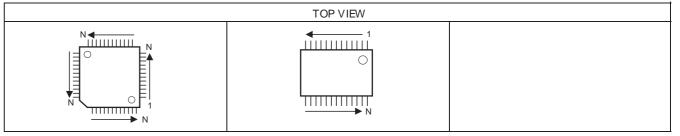
#### IC



#### CHIP IC

2-2

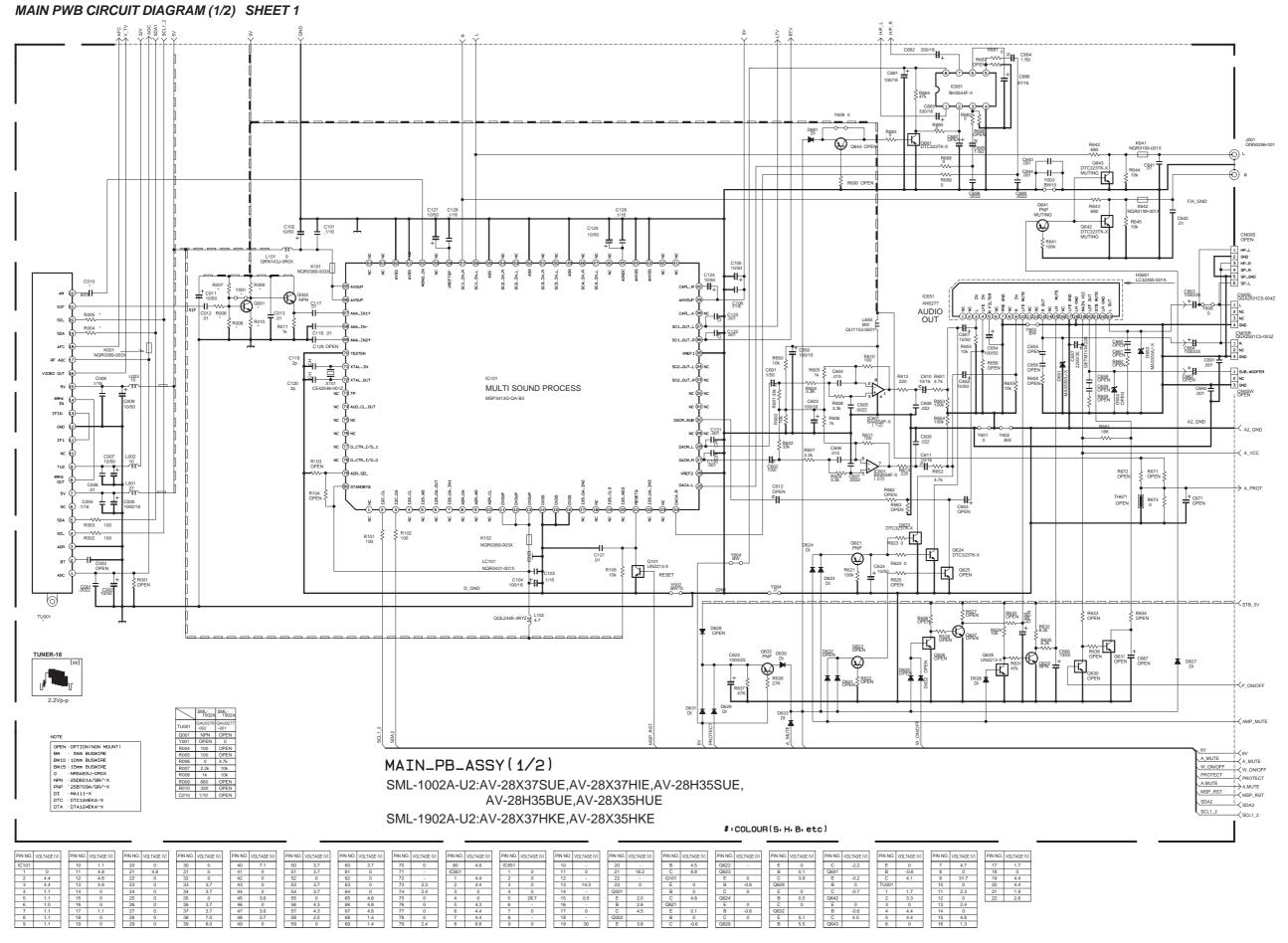
2-1



according to adjustments, use them as reference values.

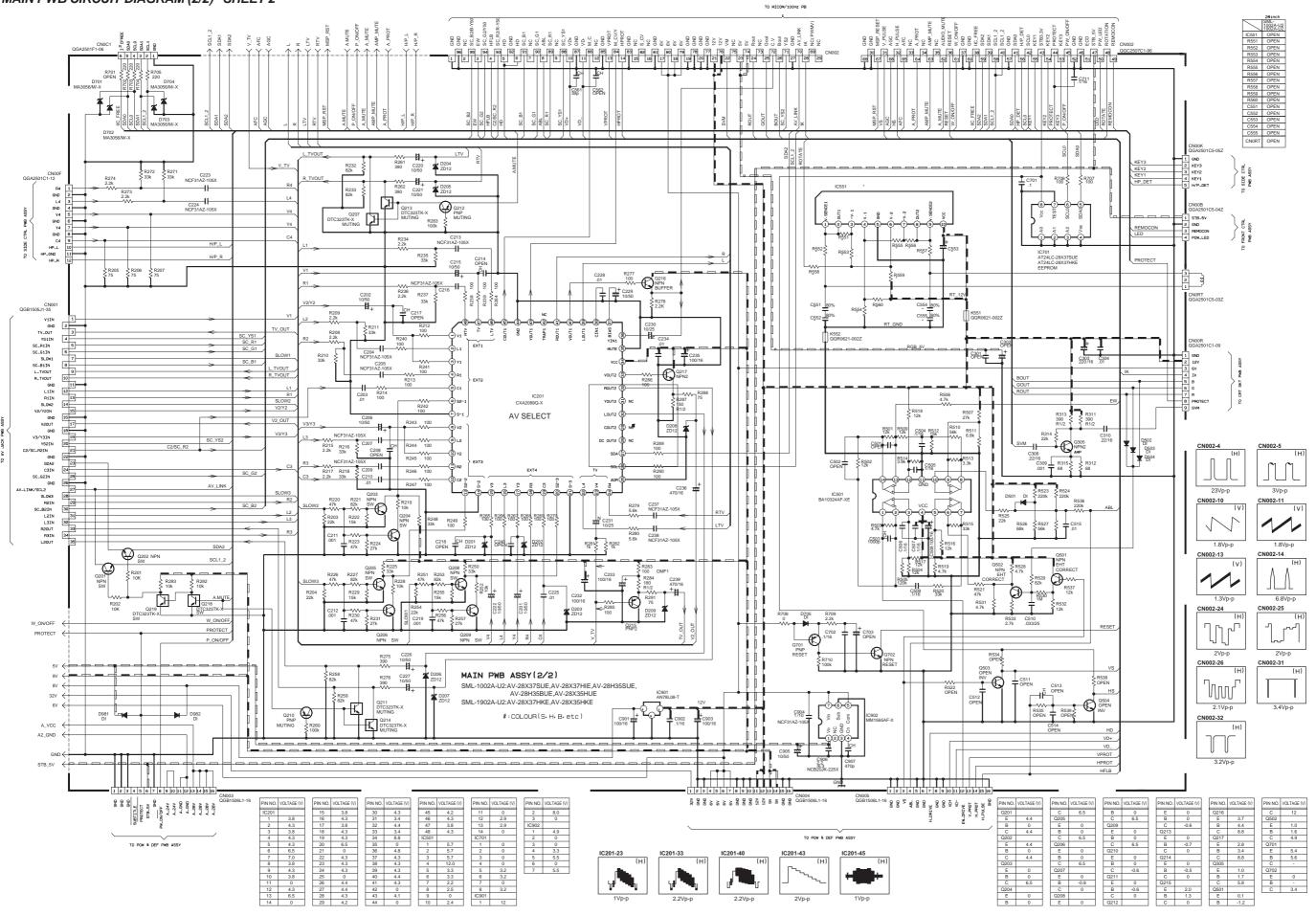
AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28X35HUE AV-28H35BUE

#### **CIRCUIT DIAGRAMS**

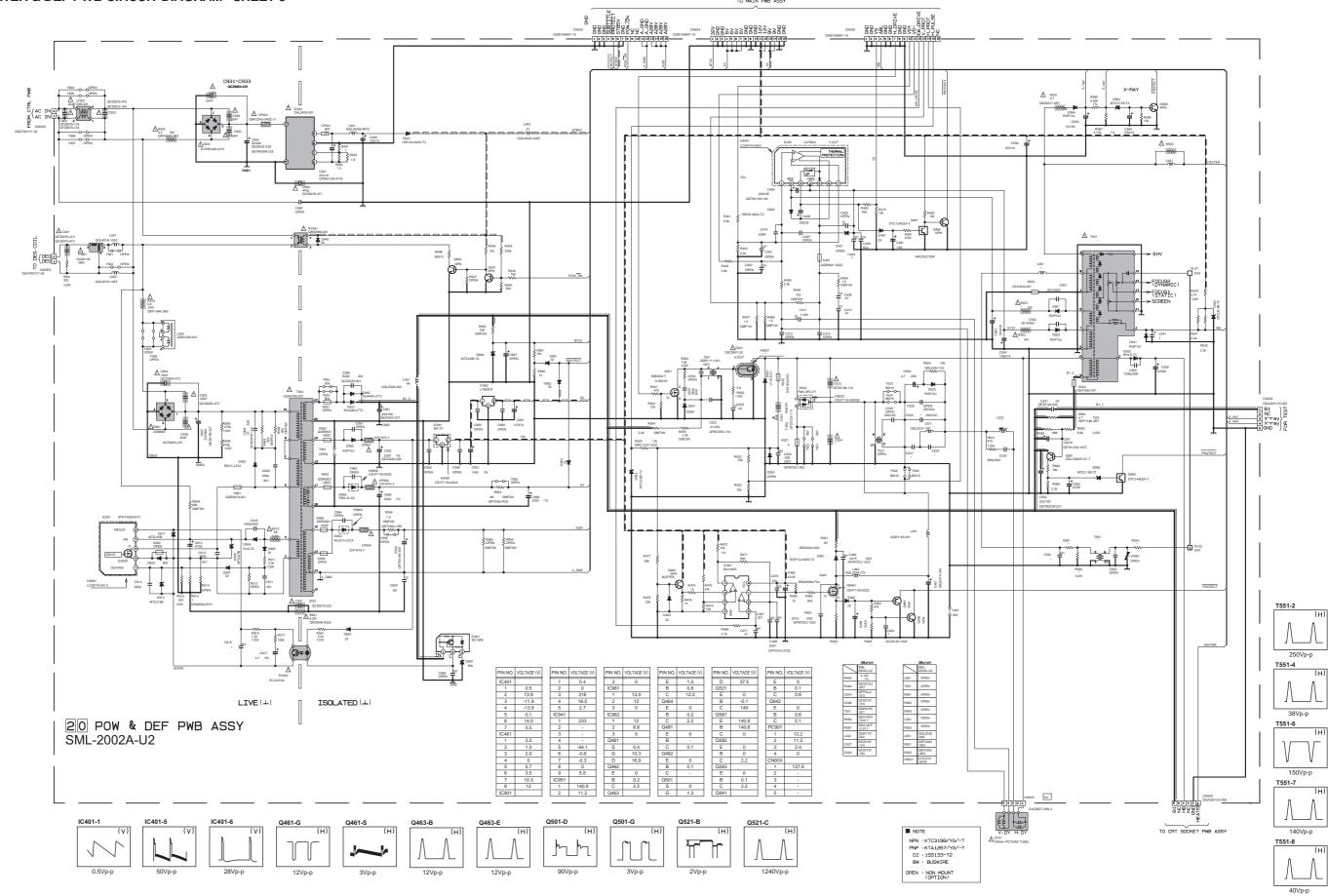


AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28X35HUE AV-28H35BUE

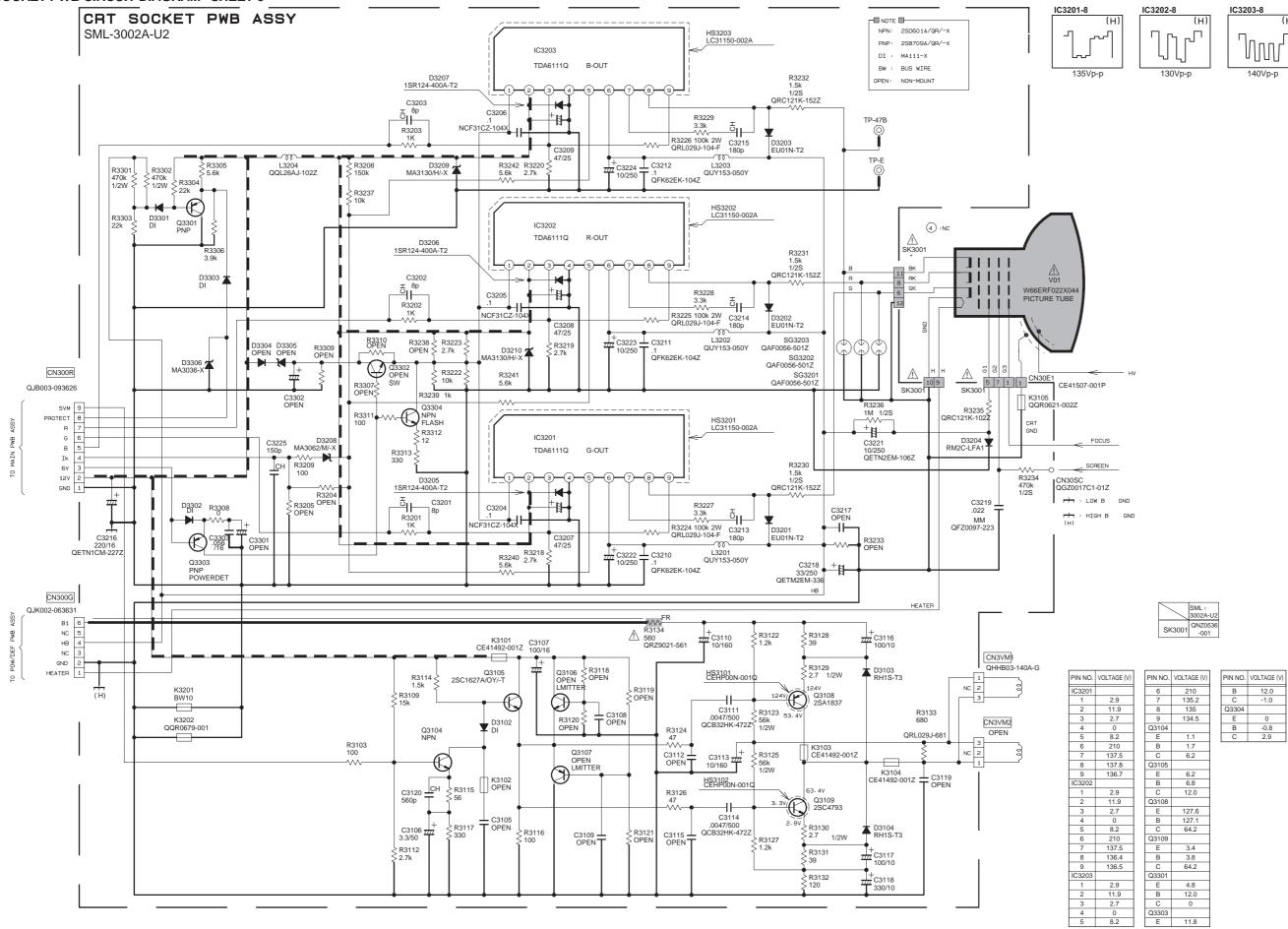
#### MAIN PWB CIRCUIT DIAGRAM (2/2) SHEET 2



### POWER & DEF PWB CIRCUIT DIAGRAM SHEET 3

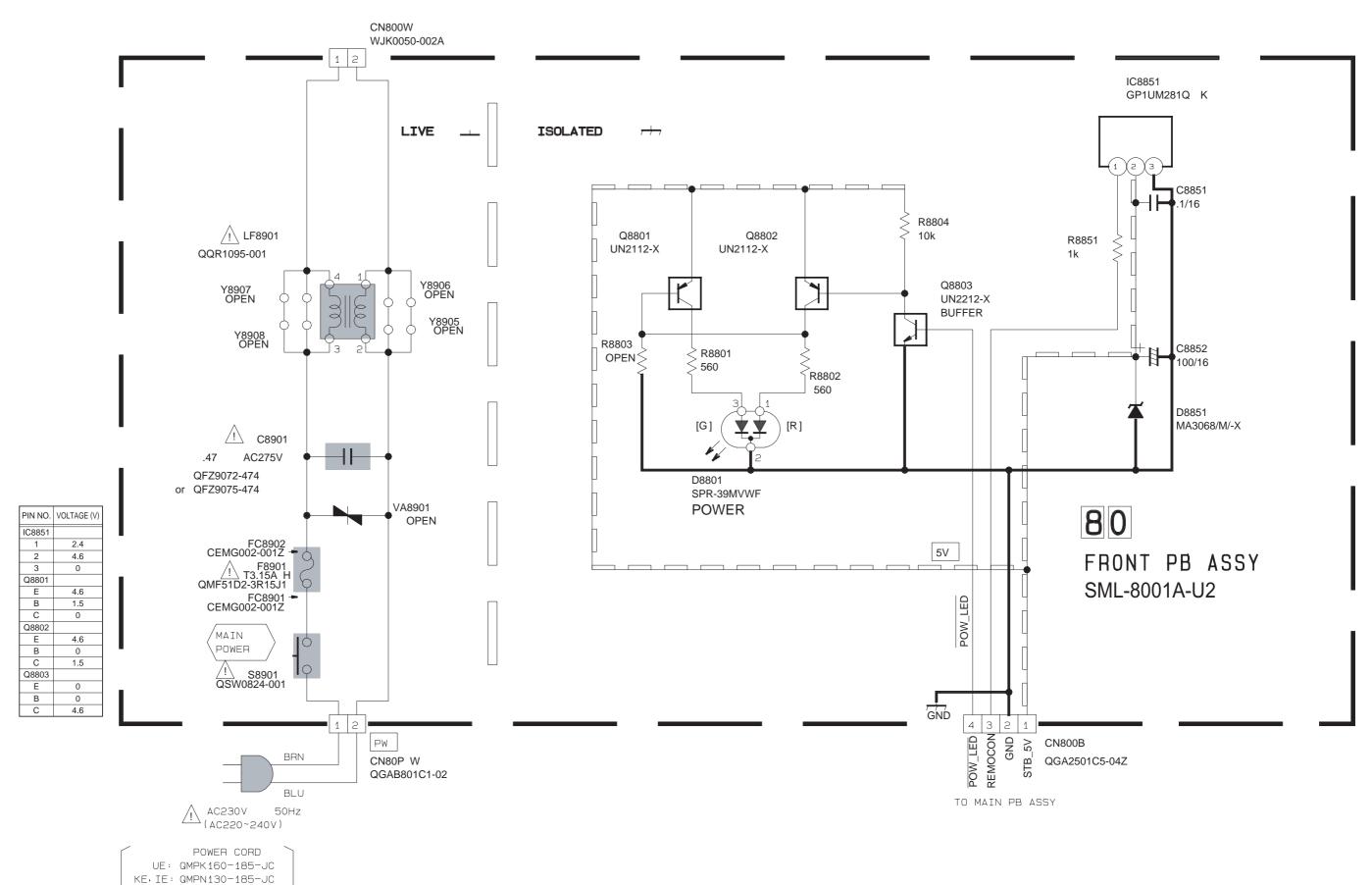


#### CRT SOCKET PWB CIRCUIT DIAGRAM SHEET 6

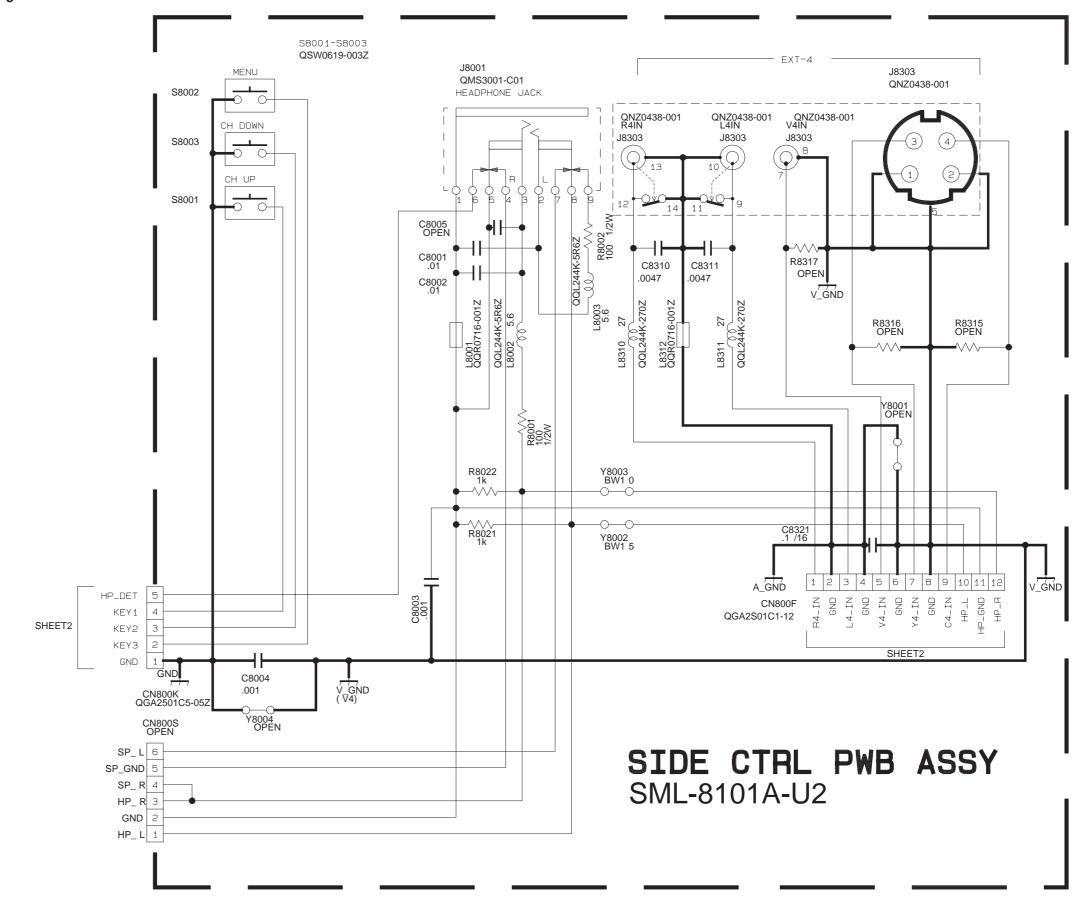


AE: QMP2980-185J5

TO POW/DEF PB ASSY

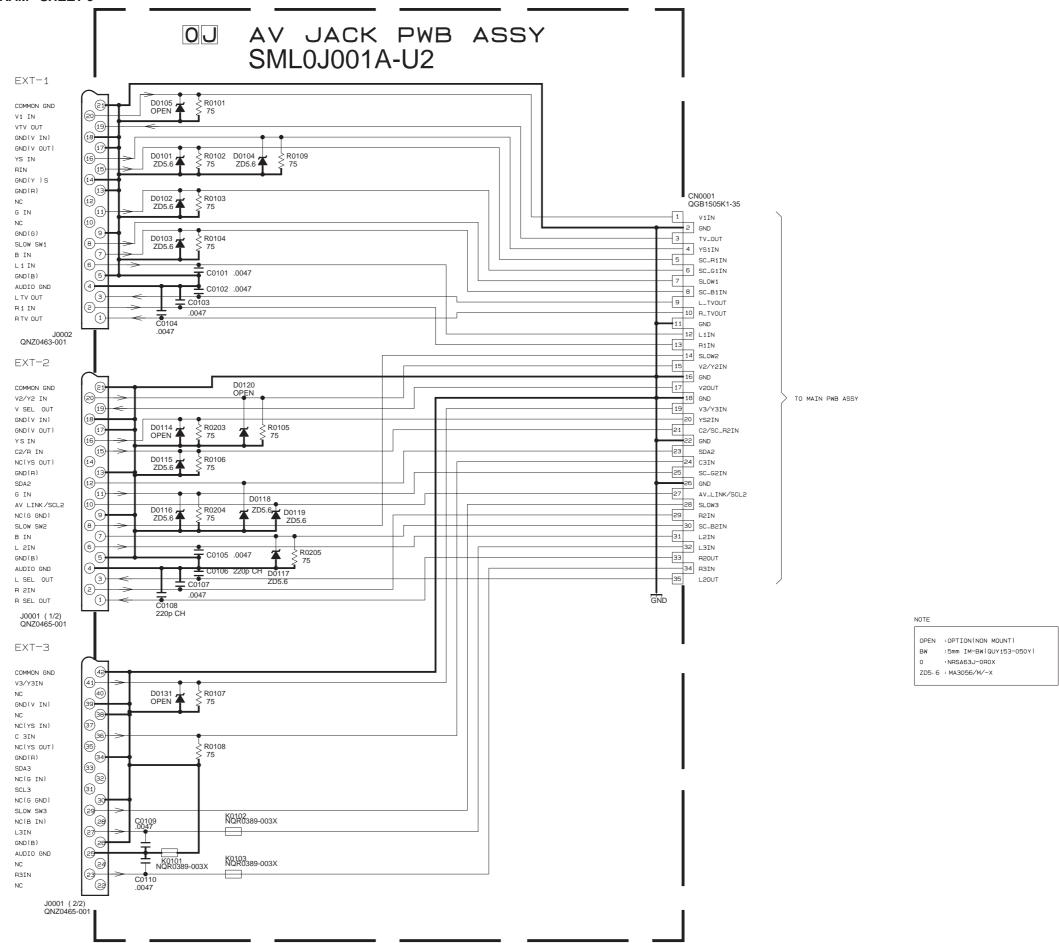


AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28X35HUE AV-28H35BUE



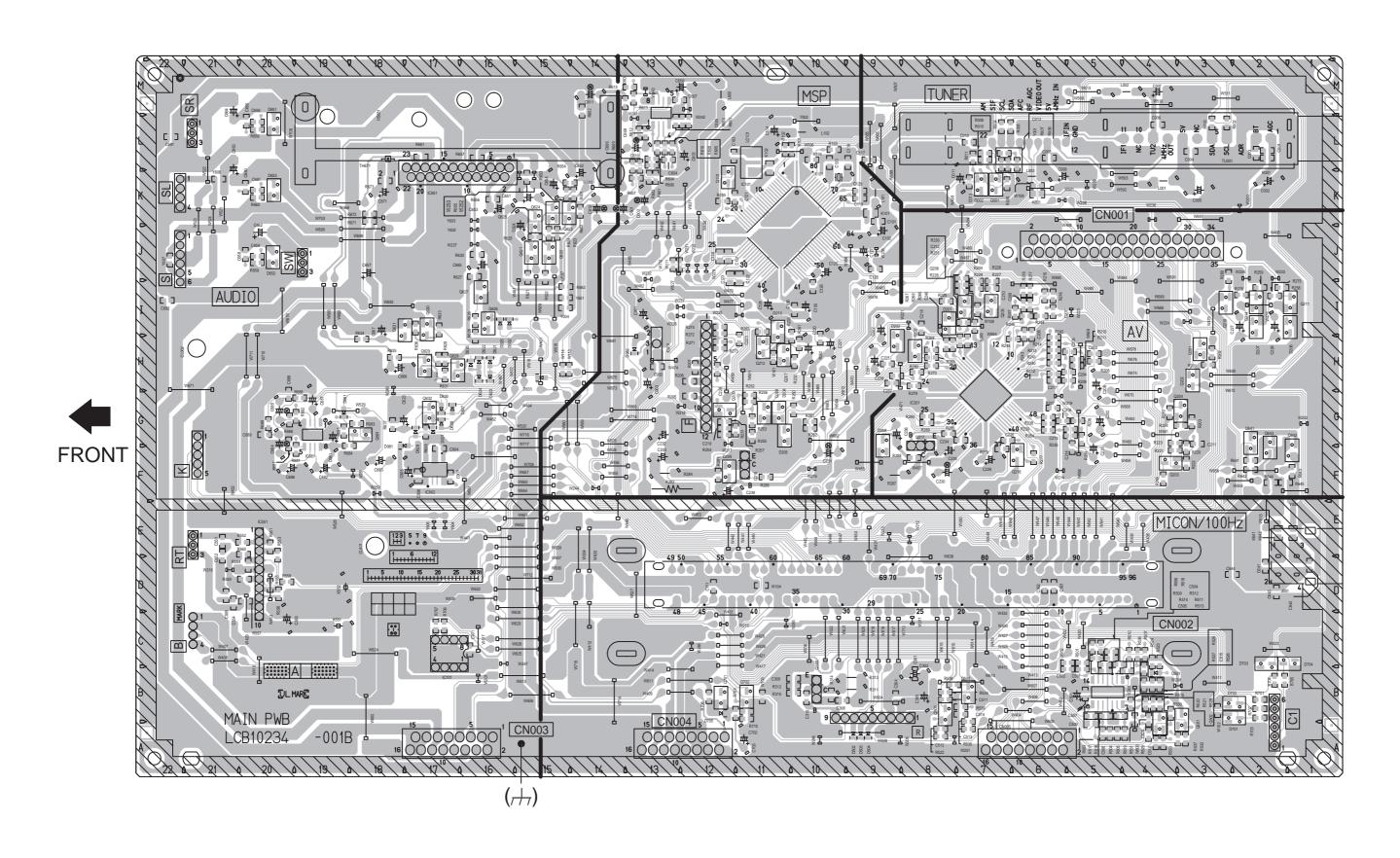
NPN: 2SD601A/QR/-X
PNP: 2SB709A/QR/-X
DI : MA111-X
DTC: DTC124EKA-X
DTA: DTA124EKA-X
0: NRSA63J-OROX
BW: 5mm IM-BW
BW10: 10mm IM-BW
BW15: 15mm IM-BW

#### AV JACK PWB CIRCUIT DIAGRAM SHEET 9

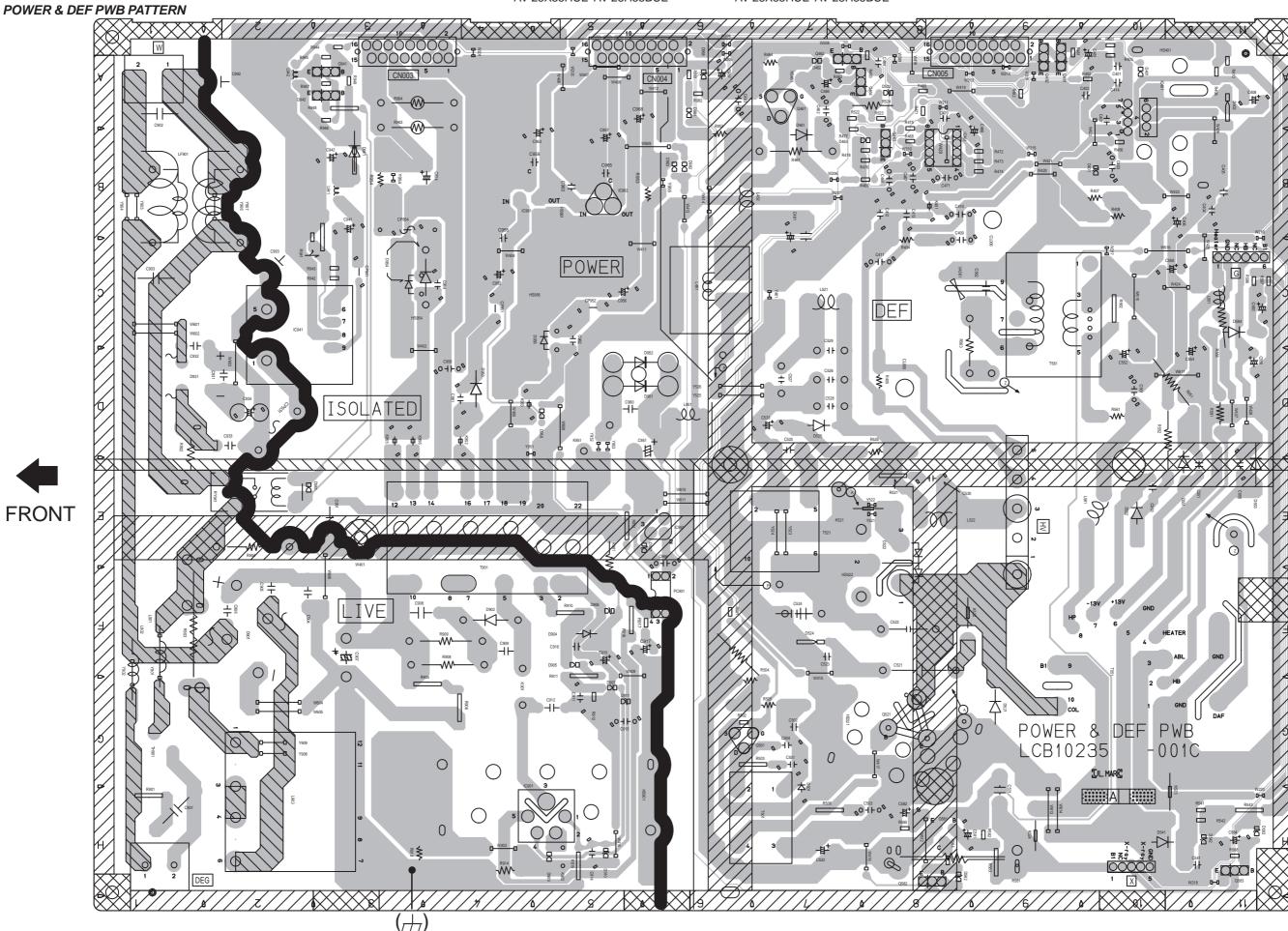


## PATTERN DIAGRAMS

MAIN PWB PATTERN

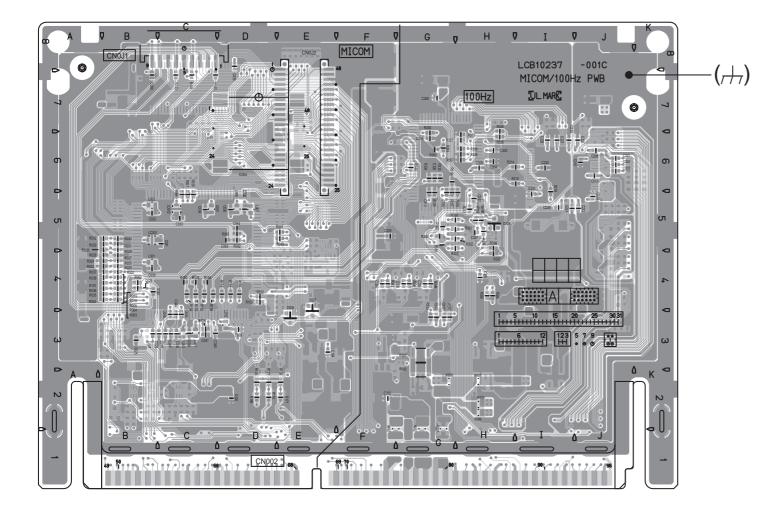


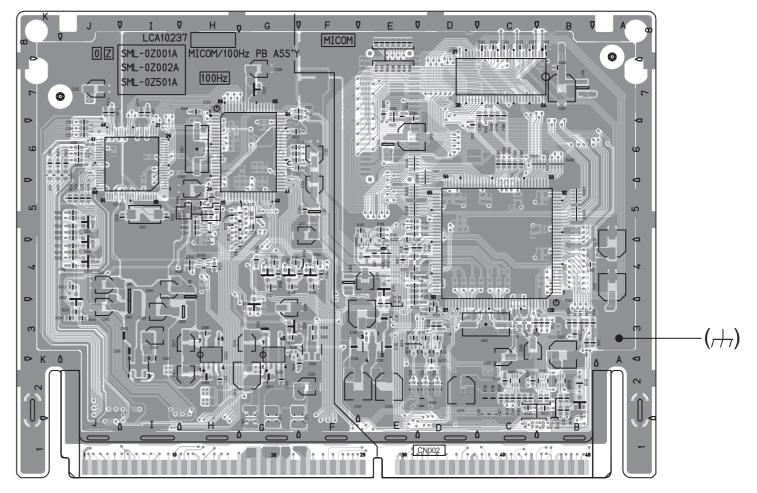
### **POWER & DEF PWB PATTERN**





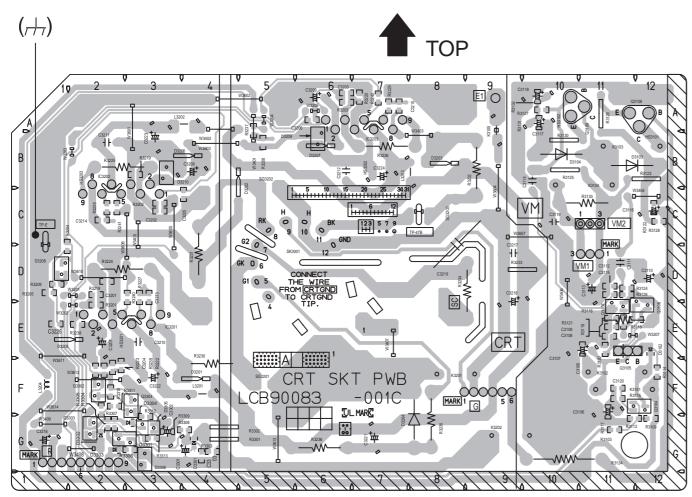




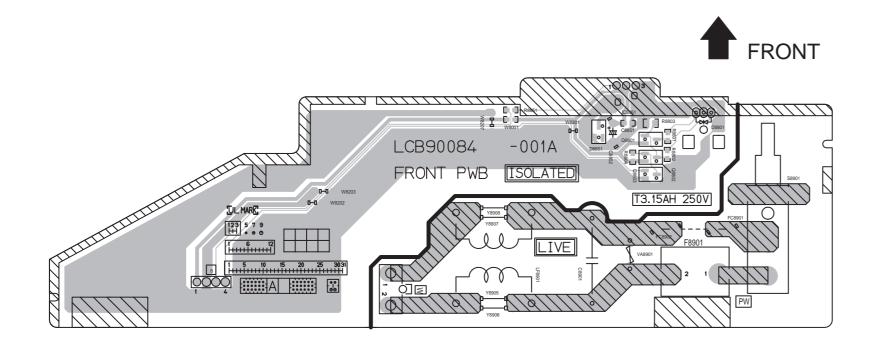


AV-28X37SUE AV-28X37HKE AV-28X35HKE AV-28X37HIE AV-28H35SUE AV-28X35HUE AV-28H35BUE AV JACK PWB PATTERN

#### CRT SOCKET PWB PATTERN

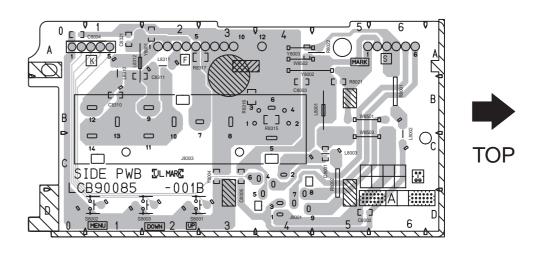


#### FRONT CONTROL PWB PATTERN



# 

#### SIDE CONTROL PWB PATTERN





AV & MULTIMEDIA COMPANY DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan



# **PARTS LIST**

## **CAUTION**

- The parts identified by the A symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

#### ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

	RESISTORS	CAPACITORS			
CR	Carbon Resistor	C CAP.	Ceramic Capacitor		
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor		
PR	Plate Resistor	M CAP.	Mylar Capacitor		
VR	Variable Resistor	CH CAP.	Chip Capacitor		
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor		
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor		
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor		
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor		
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor		
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor		
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor		
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor		
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor		
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor		
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor		
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor		
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor		
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor		
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor		

RESISTORS									
F	G	J	К	М	N	R	Н	Z	Р
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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# **USING P.W. BOARD & REMOTE CONTROL UNIT**

## [AV-28X37SUE / AV-28X37HKE / AV-28X35HKE / AV-28X37HIE]

P.W.B ASS'Y	AV-28X37SUE	AV-28X37HKE	AV-28X35HKE	AV-28X37HIE
MAIN PWB	SML-1002A-U2	SML-1902A-U2	<b>←</b>	SML-1002A-U2
POWER & DEF PWB	SML-2002A-U2	<b>←</b>	<b>←</b>	<b>←</b>
100Hz PWB	SML0Z001A-U2	←	<b>←</b>	<b>←</b>
CRT SOCKET PWB	SML-3002A-U2	←	<b>←</b>	<b>←</b>
FRONT CONTROL PWB	SML-8001A-U2	←	<b>←</b>	<b>←</b>
SIDE CONTROL PWB	SML-8101A-U2	←	<b>←</b>	<b>←</b>
AV JACK PWB	SML0J001A-U2	←	<b>←</b>	<b>←</b>
REMOTE CONTROL UNIT	RM-C54H-1C	RM-C55H-1C	<b>←</b>	<b>←</b>

## [AV-28H35SUE / AV-28H35BUE / AV-28X35HUE]

P.W.B ASS'Y	AV-28H35SUE	AV-28H35BUE	AV-28X35HUE
MAIN PWB	SML-1002A-U2	<b>←</b>	<b>←</b>
POWER & DEF PWB	SML-2002A-U2	<b>←</b>	<b>←</b>
100Hz PWB	SML0Z002A-U2	<b>←</b>	SML0Z001A-U2
CRT SOCKET PWB	SML-3002A-U2	<b>←</b>	<b>←</b>
FRONT CONTROL PWB	SML-8001A-U2	<b>←</b>	<b>←</b>
SIDE CONTROL PWB	SML-8101A-U2	<b>←</b>	<b>←</b>
AV JACK PWB	SML0J001A-U2	<b>←</b>	←
REMOTE CONTROL UNIT	RM-C54H-1C	RM-C50-1C	RM-C54H-1C

## **EXPLODED VIEW PARTS LIST -1**

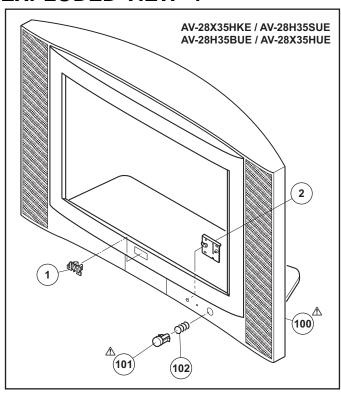
## [AV-28X35HKE / AV-28H35SUE / AV-28H35BUE / AV-28X35HUE]

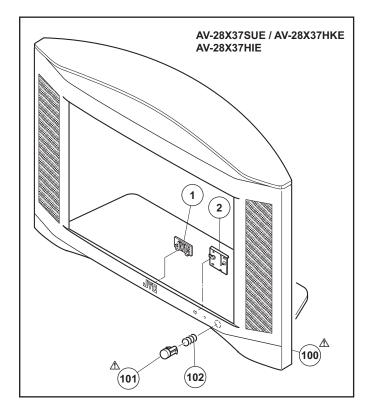
⚠ Ref.No.	Part No.	Part Name	Description	Local
1 1 1 2 2 2	LC41250-003C-C LC41250-002C-C LC41250-001C-C LC32229-001A-C LC31851-001B-C	JVC MARK JVC MARK JVC MARK WINDOW WINDOW F.CABI ASSY	Included 101, 102	H35BUE H35SUE X35HKE / X35HUE H35SUE H35BUE / X35HKE / X35HUE
<ul><li>⚠ 100</li><li>⚠ 100</li><li>⚠ 101</li><li>⚠ 101</li><li>102</li></ul>	LC11313-007A-U LC11313-008A-U LC31201-005A-U LC31201-003A-U AEM3149-001-E	F.CABI ASSY F.CABI ASSY POWER KNOB POWER KNOB SPRING	Ilncluded 101, 102 Included 101, 102	H35SUE X35HKE / X35HUE H35BUE H35SUE / X35HKE / X35HUE

## [AV-28X37SUE / AV-28X37HKE / AV-28X37HIE]

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1 1 2	LC41522-001B LC41522-002B LC32229-001A-C	JVC MARK JVC MARK WINDOW		X37HIE / X37HKE X37SUE
<u>^</u> <u>^</u> <u>^</u>	100 100 101 102	LC11562-002A-U LC11562-001A-U LC31201-003A-U AEM3149-001-E	F CABI ASSY F CABI ASSY POWER KNOB SPRING	Included 101, 102 Included 101, 102	X37HIE / X37HKE X37SUE

# **EXPLODED VIEW -1**

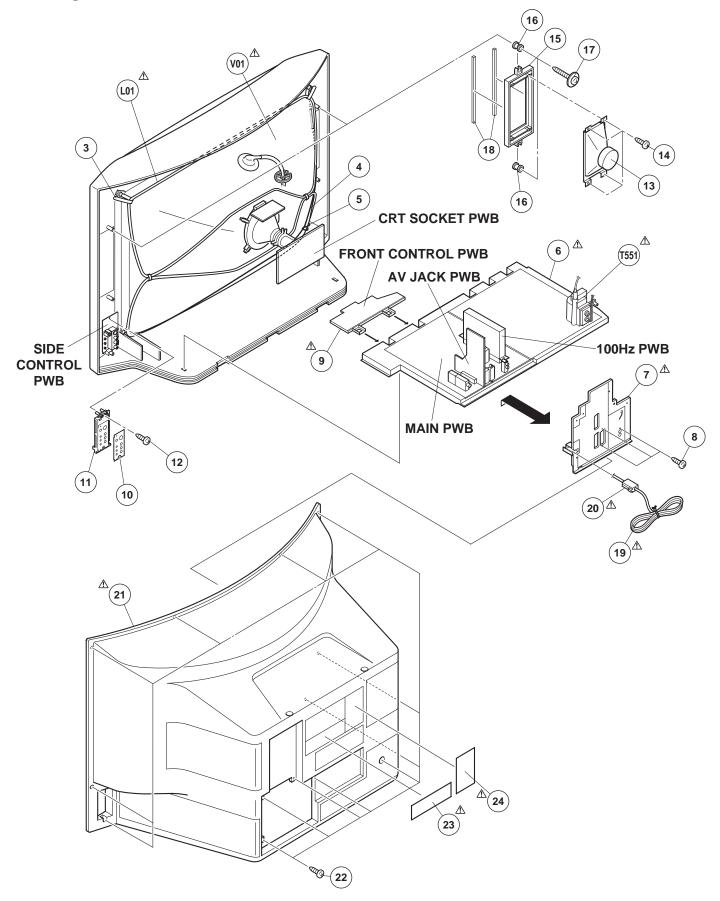




# **EXPLODED VIEW PARTS LIST -2**

⚠ Ref.No.	Part No.	Part Name	Description	Local
⚠ V01 ⚠ L01	W66ERF022X044 QQW0168-001	ITC DEG COIL	Included def.yoke, PC ma	agnet
⚠ T551 3	QQH0155-001 LC30628-002A WJY0021-001A	FB TRANSF DEG CLAMP E-BRAIDED ASSY	(x4)	
4 5 6 $\triangle$ 7 $\triangle$ 7 $\triangle$ 9 10	WJY0013-002A LC10716-002H-U LC11561-002A-U LC11561-001A-U QYSBSF3012M LC11311-001B-U LC31205-002A-U LC10856-002A-U	E-BRAIDED ASSY CHASSIS BASE AV BOARD AV BOARD TAP SCREW CONTROL BASE CONTROL SHEET SIDE CONT BASE	3mm x 12mm(x3)	H35BUE H35SUE / X35HKE / X35HUE / X37HIE / X37HKE / X37SUE
12 13 14 15 16 17	QYSBSAG4016N QAS0135-001 QAS0128-001 QYSBSAG4016N LC11310-001B-U LC40226-003A-H CM42937-006 AEM4111-001A-U	TAP SCREW SPEAKER SPEAKER TAP SCREW SPEAKER ADAPTER SPACER ASSY SCREW SPONGE	4.0mm x 16mm SP01,02(x2) SP01,02(x2) 4.0mm x 16mm(x8) (x2) (x4) (x4) (x4)	H35BUE / X35HUE / H35SUE X35HKE / X37HIE / X37HKE / X37SUE
⚠ 19 ⚠ 19 ⚠ 20 ⚠ 21	QMPN130-185-JC QMPK160-185-JC CM46618-A01-E LC11282-001C-U	POWER CORD(EU) POWER CORD(EU) POWER CORD CLMP REAR COVER	1.85m BLACK 1.85m BLACK	X35HKE / X37HIE / X37HKE H35BUE / H35SUE / X35HUE / X37SUE
A 23 A 23 A 23 A 23 A 23 A 23 A 23 A 23	QYSBSAG4016N LC11548-009A-U LC11548-006A-U LC11364-028A-U LC11548-011A-U LC11364-026A-U LC11364-024A-U LC11548-004A-U LC30789-002B-U	TAP SCREW RATING LABEL WARNING LABEL	4.0mm x 16mm(x8)	H35BUE H35SUE X35HKE X35HUE X37HIE X37HKE X37SUE H35SUE / X35HUE / X37SUE ONLY

# **EXPLODED VIEW -2**



# PRINTED WIRING BOARD PARTS LIST

[AV-28H35BUE / AV-28H35SUE / AV-28X35HUE /
AV-28X37HIE / AV-28X37SUE]
MAIN PW BOARD ASS'Y (SML-1002A-U2)

AV-28X	37HIE / AV-28X	(3/SUE]		-			
		S'Y (SML-1002A-U2)		D701	MA3056/M/-X	Z DIODE	
ΔRef No.	Part No.	Part Name	Description Local	D702 D703	MA3056/M/-X MA3056/M/-X	Z DIODE Z DIODE	
<u>2</u> 23/(C) 140.	r dit ivo.	T dit Namo	Description Local	D704	MA3056/M/-X	Z DIODE	
IC101	MSP3413G-QA-B3	IC		D705 D981	MA111-X MA111-X	SI DIODE SI DIODE	
IC201	CXA2089Q-X	IC		D982	MA111-X	SI DIODE	
IC501	BA10324AF-XE	IC IC IC IC IC		C001	NCB31HK-222X	C CAPACITOR	2200pF 50V K
IC601 IC651	BA4558F-X AN5277	IC IC		C002	QETN1HM-106Z	E CAPACITOR	10uF 50V M
IC701	AT24LC-28X37SUE	IC	(SERVICE)	C004 C005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
IC901 IC902	AN78L08-T MM1565AF-X	IC IC		C005	QETN1CM-108Z NCB31HK-103X	E CAPACITOR C CAPACITOR	1000uF 16V M 0.01uF 50V K
				C007	QETN1HM-106Z	E CAPACITOR	10uF 50V M
Q001 Q002	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C008 C009	NCB31CK-104X QETN1HM-106Z	C CAPACITOR E CAPACITOR	0.1uF 16V K 10uF 50V M
Q101	UN2213-X	DIGI TRANSISTOR		C010	NCF31AZ-105X	C CAPACITOR	1uF 10V Z
Q201 Q202	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C011 C012	QETN1HM-106Z NCB31HK-103X	E CAPACITOR C CAPACITOR	10uF 50V M 0.01uF 50V K
Q203	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR		C013	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q204	2SD601A/QR/-X	TRANSISTOR		C101 C102	NCB31CK-104X QETN1HM-106Z	C CAPACITOR E CAPACITOR	0.1uF 16V K 10uF 50V M
Q205 Q206	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C103	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
Q207	DTC323TK-X	DIGI TRANSISTOR		C104 C105	QETN1CM-107Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	100uF 16V M 10uF 50V M
Q208 Q209	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C106	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
Q210	2SB709A/QR/-X	TRANSISTOR		C117	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q211 Q212	DTC323TK-X 2SB709A/QR/-X	DIGI TRANSISTOR TRANSISTOR		C118 C119	NCB31HK-103X NDC31HJ-2R0X	C CAPACITOR C CAPACITOR	0.01uF 50V K 2pF 50V J
Q213	DTC323TK-X	DIGI TRANSISTOR		C120	NDC31HJ-2R0X	C CAPACITOR C CAPACITOR	2pF 50V J
Q214 Q215	DTC323TK-X 2SA933AS/QR/-T	DIGI TRANSISTOR TRANSISTOR		C121 C122	NCB31HK-103X NDC31HJ-102X	C CAPACITOR C CAPACITOR	0.01uF 50V K 1000pF 50V J
Q215 Q216	2SD601A/QR/-X	TRANSISTOR		C123	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
Q217	2SC1740S/QR/-T	TRANSISTOR TRANSISTOR		C124 C125	QETN1HM-106Z QETN1HM-106Z	É CAPACITOR E CAPACITOR	10uF 50V M 10uF 50V M
Q305 Q501	2SC1740S/QR/-T 2SD601A/QR/-X	TRANSISTOR		C126	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
Q502	2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C127 C128	QETN1HM-106Z	E CAPACITOR C CAPACITOR	10uF 50V M 0.1uF 16V K
Q503 Q504	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR		C128	NCB31CK-104X NDC31HJ-102X	C CAPACITOR C CAPACITOR	1000pF 50V J
Q621	2SB709A/QR/-X	TRANSISTOR		C131	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
Q622 Q623	2SB709A/QR/-X UN2213-X	TRANSISTOR DIGI TRANSISTOR		C201 C202	QETN1HM-106Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	10uF 50V M 10uF 50V M
Q624	UN2213-X	DIGI TRANSISTOR		C203	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q625 Q626	UN2213-X UN2213-X	DIGI TRANSISTOR		C204 C205	NCF31AZ-105X NCF31AZ-105X	C CAPACITOR C CAPACITOR	1uF 10V Z 1uF 10V Z
Q626 Q627	2SD601A/QR/-X	DIGI TRANSISTOR TRANSISTOR		C206	QETN1HM-106Z	E CAPACITOR	10uF 50V M
Q628	UN2213-X	DIGI TRANSISTOR		C207 C209	NCF31AZ-105X NCF31AZ-105X	C CAPACITOR C CAPACITOR	1uF 10V Z 1uF 10V Z
Q629 Q632	2SD601A/QR/-X 2SB709A/QR/-X	TRANSISTOR TRANSISTOR		C210	NCB31HK-103X	C CAPACITOR	0.01uF 50V K
Q641	2SB709A/QR/-X	TRANSISTOR		C211 C212	NCB31HK-102X NCB31HK-102X	C CAPACITOR C CAPACITOR	1000pF 50V K 1000pF 50V K
Q642 Q643	DTC323TK-X DTC323TK-X	DIGI TRANSISTOR DIGI TRANSISTOR		C212	NCF31AZ-105X	C CAPACITOR	1uF 10V Z
Q701	2SB709A/QR/-X	TRANSISTOR		C215	QETN1HM-106Z	E CAPACITOR	10uF 50V M
Q702	2SD601A/QR/-X	TRANSISTOR		C216 C219	NCF31AZ-105X NCB31HK-102X	C CAPACITOR C CAPACITOR	1uF 10V Z 1000pF 50V K
D201	MA3120/M/-X	Z DIODE		C220	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D202 D203	MA3120/M/-X MA3120/M/-X	Z DIODE Z DIODE		C221 C222	QETN1HM-106Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	10uF 50V M 10uF 50V M
D204	MA3120/M/-X	Z DIODE		C223	NCF31AZ-105X	C CAPACITOR	1uF 10V Z
D205 D206	MA3120/M/-X MA3120/M/-X	Z DIODE Z DIODE		C224 C225	NCF31AZ-105X NCB31HK-103X	C CAPACITOR C CAPACITOR	1uF 10V Z 0.01uF 50V K
D200 D207	MA3120/M/-X	Z DIODE Z DIODE		C226	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D208	MA3120/M/-X	Z DIODE		C227 C228	QETN1HM-106Z NCB31HK-103X	E CAPACITOR C CAPACITOR	10uF 50V M 0.01uF 50V K
D209 D501	MA3120/M/-X MA111-X	Z DIODE SI DIODE		C229	QETN1HM-106Z	E CAPACITOR	10uF 50V M
D502	MA111-X	SI DIODE		C230	QENC1EM-106Z QENC1EM-106Z	BP E CAPACITOR BP E CAPACITOR	10uF 25V M 10uF 25V M
D503 D504	MA111-X MA111-X	SI DIODE SI DIODE		C231 C232	QETN1CM-107Z	E CAPACITOR	100uF 16V M
D621	MA111-X	SI DIODE		C233	QETN1CM-107Z	E CAPACITOR	100uF 16V M
D622 D623	MA111-X MA111-X	SI DIODE SI DIODE		C234 C235	NCB31HK-103X QETN1CM-107Z	C CAPACITOR E CAPACITOR	0.01uF 50V K 100uF 16V M
D624	MA111-X	SI DIODE		C236	QETN1CM-477Z	E CAPACITOR	470uF 16V M
D625 D626	MA111-X MA111-X	SI DIODE SI DIODE		C237 C238	NCF31AZ-105X NCF31AZ-105X	C CAPACITOR C CAPACITOR	1uF 10V Z 1uF 10V Z
D627	MA111-X	SI DIODE		C239	QETN1CM-477Z	E CAPACITOR	470uF 16V M
D628	MA111-X	SI DIODE		C303 C304	QETN1HM-106Z NCB31HK-103X	E CAPACITOR C CAPACITOR	10uF 50V M 0.01uF 50V K
D629 D630	MA111-X MA111-X	SI DIODE SI DIODE		C308	NCB31CK-224X	C CAPACITOR	0.22uF 16V K
D631	MA111-X	SI DIODE		C309 C310	NCB31HK-102X NCB31CK-224X	C CAPACITOR C CAPACITOR	1000pF 50V K 0.22uF 16V K
D633 D651	MA111-X MA3330/L/-X	SI DIODE Z DIODE		C503	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
D652	MA3330/L/-X	Z DIODE		C504	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
D653	MA3330/L/-X	Z DIODE		C506 C507	NCB31CK-104X NCB31CK-104X	C CAPACITOR C CAPACITOR	0.1uF 16V K 0.1uF 16V K

▲Ref No.

Part No.

Part Name

Description Local

ÆRef No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Local
C508 C509	QETN1CM-107Z NCB31CK-104X	E CAPACITOR C CAPACITOR	100uF 16V M 0.1uF 16V K	R232 R233	NRSA63J-823X NRSA63J-823X	MG RESISTOR MG RESISTOR	82kΩ 1/16W J 82kΩ 1/16W J
C510	NCB31EK-333X	C CAPACITOR C CAPACITOR	0.033uF 25V K	R234	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C511 C513	NCB31HK-682X NDC31HJ-150X	C CAPACITOR C CAPACITOR	6800pF 50V K 15pF 50V J	R235 R236	NRSA63J-333X NRSA63J-222X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 2.2kΩ 1/16W J
C515	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R237	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C551	NCF31CZ-224X	C CAPACITOR	0.22uF 16V Z	R238 R239	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C552 C553	NCF31CZ-224X QETN1EM-476Z	C CAPACITOR E CAPACITOR	0.22uF 16V Z 47uF 25V M	R239 R240	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C554	NCF31CZ-224X	C CAPACITOR	0.22uF 16V Z	R241	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C555 C601	NCF31CZ-224X QENC1HM-105Z	C CAPACITOR BP E CAPACITOR	0.22uF 16V Z 1uF 50V M	R242 R243	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C602	QENC1HM-105Z	BP E CAPACITOR	1uF 50V M	R244	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C603 C604	QETN1CM-107Z NCB31HK-153X	E CAPACITOR C CAPACITOR	100uF 16V M 0.015uF 50V K	R245 R246	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C605	NCB31HK-222X	C CAPACITOR	2200pF 50V K	R247	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C606 C607	NCB31HK-153X NCB31HK-222X	C CAPACITOR C CAPACITOR	0.015uF 50V K 2200pF 50V K	R248 R249	NRSA63J-333X NRSA63J-101X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 100Ω 1/16W J
C608	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	R250	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C609 C610	NCB31HK-223X QENC1HM-105Z	C CAPACITOR BP E CAPACITOR	0.022uF 50V K 1uF 50V M	R251 R252	NRSA63J-473X NRSA63J-103X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 10kΩ 1/16W J
C611	QENC1HM-105Z	BP E CAPACITOR	1uF 50V M	R253	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C623 C641	QETN1EM-108Z NCB31HK-103X	E CAPACITOR C CAPACITOR	1000uF 25V M 0.01uF 50V K	R254 R255	NRSA63J-223X NRSA63J-153X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 15kΩ 1/16W J
C642	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R255 R256	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C650 C651	QETN1CM-107Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	100uF 16V M 10uF 50V M	R257 R258	NRSA63J-273X NRSA63J-823X	MG RESISTOR MG RESISTOR	27kΩ 1/16W J 82kΩ 1/16W J
C652	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R259	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C654 C657	QETN1HM-107Z QETM1VM-228	E CAPACITOR E CAPACITOR	100uF 50V M 2200uF 35V M	R260 R261	NRSA63J-104X NRSA63J-391X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 390Ω 1/16W J
C663	QETN1EM-108Z	E CAPACITOR	1000uF 25V M	R262	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C664 C665	QETN1EM-108Z QETN1HM-106Z	E CAPACITOR E CAPACITOR	1000uF 25V M 10uF 50V M	R263 R264	NRSA63J-104X NRSA63J-101X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 100Ω 1/16W J
C666	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R265	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C701 C702	NCB31HK-104X NCB31CK-104X	C CAPACITOR C CAPACITOR	0.1uF 50V K 0.1uF 16V K	R266 R267	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C901	QETN1CM-107Z	E CAPACITOR	100uF 16V M	R268	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C902 C903	NCB31CK-104X QETN1CM-107Z	C CAPACITOR E CAPACITOR	0.1uF 16V K 100uF 16V M	R269 R270	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J
C904	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R271	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C905 C906	QETN1HM-106Z NCF31AZ-105X	E CAPACITOR C CAPACITOR	10uF 50V M 1uF 10V Z	R272 R273	NRSA63J-333X NRSA63J-222X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 2.2kΩ 1/16W J
C907	NDC31HJ-471X	C CAPACITOR	470pF 50V J	R274	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R002	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R275 R276	NRSA63J-391X NRSA63J-391X	MG RESISTOR MG RESISTOR	390Ω 1/16W J 390Ω 1/16W J
R003	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R277	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R004 R005	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R278 R279	NRSA63J-222X NRSA63J-562X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 5.6kΩ 1/16W J
R006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R280	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R007 R008	NRSA63J-222X NRSA63J-102X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 1kΩ 1/16W J	R281 R282	NRSA63J-102X NRSA63J-102X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 1kΩ 1/16W J
R009	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	R283	QRG01GJ-101	OMF RESISTOR	100Ω 1W J
R010 R011	NRSA63J-331X NRSA63J-102X	MG RESISTOR MG RESISTOR	330Ω 1/16W J 1kΩ 1/16W J	R284 R285	QRK126J-181X NRSA63J-101X	UNF C RESISTOR MG RESISTOR	180Ω 1/2W J 100Ω 1/16W J
R101	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R286	NRSA63J-101X NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R102 R105	NRSA63J-101X NRSA63J-103X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 10kΩ 1/16W J	R287 R288	QRK126J-151X NRSA63J-750X	UNF C RESISTOR MG RESISTOR	150Ω 1/2W J 75Ω 1/16W J
R201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R289	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R202 R203	NRSA63J-103X NRSA63J-223X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 22kΩ 1/16W J	R290 R291	NRSA63J-101X NRSA63J-750X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 75Ω 1/16W J
R204 R205	NRSA63J-223X NRSA63J-750X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 75Ω 1/16W J	R311 R312	QRK126J-391X NRSA63J-680X	UNF C RESISTOR MG RESISTOR	390Ω 1/2W J 68Ω 1/16W J
R205	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R313	QRK126J-391X	UNF C RESISTOR	390Ω 1/2W J
R208 R209	NRSA63J-222X NRSA63J-222X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 2.2kΩ 1/16W J	R314 R315	NRSA63J-223X NRSA63J-680X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 68Ω 1/16W J
R210	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R501	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R211 R212	NRSA63J-333X NRSA63J-101X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 100Ω 1/16W J	R502 R503	NRSA63J-123X NRSA63J-123X	MG RESISTOR MG RESISTOR	12kΩ 1/16W J 12kΩ 1/16W J
R213	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R504	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R214 R215	NRSA63J-101X NRSA63J-222X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 2.2kΩ 1/16W J	R505 R506	NRSA63J-124X NRSA63J-272X	MG RESISTOR MG RESISTOR	120kΩ 1/16W J 2.7kΩ 1/16W J
R216	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R507	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J
R217 R218	NRSA63J-222X NRSA63J-333X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 33kΩ 1/16W J	R509 R510	NRSA63J-123X NRSA63J-563X	MG RESISTOR MG RESISTOR	12kΩ 1/16W J 56kΩ 1/16W J
R219	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R511	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R220 R221	NRSA63J-473X NRSA63J-823X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 82kΩ 1/16W J	R512 R513	NRSA63J-153X NRSA63J-332X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 3.3kΩ 1/16W J
R222	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	R514	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R223 R224	NRSA63J-473X NRSA63J-273X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 27kΩ 1/16W J	R515 R516	NRSA63J-333X NRSA63J-123X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 12kΩ 1/16W J
R225	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R517	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R226 R227	NRSA63J-473X NRSA63J-823X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 82kΩ 1/16W J	R518 R519	NRSA63J-153X NRSA63J-472X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 4.7kΩ 1/16W J
R228	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R520	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R229 R230	NRSA63J-153X NRSA63J-473X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 47kΩ 1/16W J	R521 R522	NRSA63J-473X NRSA63J-103X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 10kΩ 1/16W J
R231	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	R523	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J

⚠Ref No.	Part No.	Part Name	Description Local	ÆRef No.	Part No.	Part Name	Description Local
R524	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	CN00B	QJK002-042214	SIN CR C-B WIRE	
R525	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	CN00F	QGA2501C1-12	CONNECTOR	W-B (1-12)
R526 R527	NRSA63J-683X NRSA63J-563X	MG RESISTOR MG RESISTOR	68kΩ 1/16W J 56kΩ 1/16W J	CN00K CN00R	QGA2501C5-05Z QGA2501C1-10	CONNECTOR CONNECTOR	W-B (1-5) W-B (1-10)
R528	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	CN0C1	QGA2501F1-06	CONNECTOR	W-B (1-10)
R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	CN0SL	QGA2501C5-04Z	CONNECTOR	W-B (1-4)
R530 R531	NRSA63J-154X NRSA63J-472X	MG RESISTOR MG RESISTOR	150kΩ 1/16W J 4.7kΩ 1/16W J	CN0SR HS651	QGA2501C5-03Z LC30145-003A	CONNECTOR HEAT SINK/AL-F/	W-B (1-3)
R532	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	J001	QNN0296-001	PIN JACK	AUDIO OUT
R533	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	K101	NQR0389-003X	FERRITE BEADS	
R534 R535	NRSA63J-682X NRSA63J-563X	MG RESISTOR MG RESISTOR	6.8kΩ 1/16W J 56kΩ 1/16W J	K102 K641	NQR0389-003X NQR0199-001X	FERRITE BEADS FERRITE BEADS	
R536	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	K642	NQR0199-001X	FERRITE BEADS	
R537	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	LC101	NQR0431-001X	EMI FILTER	0.22uF 50V Z
R538 R539	NRSA63J-182X NRSA63J-332X	MG RESISTOR MG RESISTOR	1.8kΩ 1/16W J 3.3kΩ 1/16W J	TU001 W101	QAU0276-001 NRSA63J-0R0X	TUNER MG RESISTOR	0Ω 1/16W J
R551	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	W102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R552	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	W103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R553 R554	NRSA63J-683X NRSA63J-562X	MG RESISTOR MG RESISTOR	68kΩ 1/16W J 5.6kΩ 1/16W J	W104 W108	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R555	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J	W109	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R556	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	X101	CE42546-001Z	X TAL	00.4/40/4/ 1
R557 R558	NRSA63J-100X NRSA63J-562X	MG RESISTOR MG RESISTOR	10Ω 1/16W J 5.6kΩ 1/16W J	Y004 Y603	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
R559	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1003	NICOA000-UNOX	WIG INLOIGTOR	022 1/ 1000 0
R560	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J				
R601 R602	NRSA63J-333X NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J 33kΩ 1/16W J	[A\/ 00\	/25111/E / A\/ 20	01107111/F1	
R603	NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J	-	(35HKE / AV-2	-	
R604	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	MAIN P	W BOARD AS	S'Y (SML-1902 <i>A</i>	\-U2)
R605	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		Part No.	Part Name	Description Local
R606 R607	NRSA63J-102X NRSA63J-332X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 3.3kΩ 1/16W J	<u> </u>	Tarrio.	T dit Name	Description Local
R608	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	10101		10	
R609	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	IC101 IC201	MSP3413G-QA-B3 CXA2089Q-X	IC IC	
R610 R611	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	IC501	BA10324AF-XE	IC	
R612	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	IC601	BA4558F-X	IC	
R613	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	IC651 IC701	AN5277 AT24LC-28X37HKE	IC IC	(SERVICE)
R621 R622	NRSA63J-104X NRSA63J-104X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 100kΩ 1/16W J	IC901	AN78L08-T	IC	(SLIVIOL)
R623	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	IC902	MM1565AF-X	IC	
R624	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	Q002	2SD601A/QR/-X	TRANSISTOR	
R626 R627	NRSA63J-103X NRSA63J-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W J	Q101	UN2213-X	DIGI TRANSISTOR	
R628	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	Q201	2SD601A/QR/-X	TRANSISTOR	
R629	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	Q202 Q203	2SD601A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR	
R630 R631	NRSA63J-822X NRSA63J-473X	MG RESISTOR MG RESISTOR	8.2kΩ 1/16W J 47kΩ 1/16W J	Q203 Q204	2SD601A/QR/-X	TRANSISTOR	
R632	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	Q205	2SD601A/QR/-X	TRANSISTOR	
R635	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	Q206 Q207	2SD601A/QR/-X DTC323TK-X	TRANSISTOR DIGI TRANSISTOR	
R637 R638	NRSA63J-473X NRSA63J-273X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 27kΩ 1/16W J	Q208	2SD601A/QR/-X	TRANSISTOR	
R641	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	Q209	2SD601A/QR/-X	TRANSISTOR	
R642	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	Q210 Q211	2SB709A/QR/-X DTC323TK-X	TRANSISTOR DIGI TRANSISTOR	
R643 R644	NRSA63J-681X NRSA63J-103X	MG RESISTOR MG RESISTOR	680Ω 1/16W J 10kΩ 1/16W J	Q212	2SB709A/QR/-X	TRANSISTOR	
R645	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	Q213	DTC323TK-X	DIGI TRANSISTOR	
R650	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	Q214 Q215	DTC323TK-X 2SA933AS/QR/-T	DIGI TRANSISTOR TRANSISTOR	
R651 R652	NRSA63J-473X NRSA63J-473X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 47kΩ 1/16W J	Q215 Q216	2SD601A/QR/-X	TRANSISTOR	
R653	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	Q217	2SC1740S/QR/-T	TRANSISTOR	
R654	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	Q305 Q501	2SC1740S/QR/-T 2SD601A/QR/-X	TRANSISTOR TRANSISTOR	
R655 R657	NRSA63J-103X NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 10kΩ 1/16W J	Q502	2SD601A/QR/-X	TRANSISTOR	
R661	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	Q503	2SD601A/QR/-X	TRANSISTOR	
R702	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	Q504 Q621	2SD601A/QR/-X 2SB709A/QR/-X	TRANSISTOR TRANSISTOR	
R703 R704	NRSA63J-221X NRSA63J-221X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 220Ω 1/16W J	Q621 Q622	2SB709A/QR/-X 2SB709A/QR/-X	TRANSISTOR	
R705	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	Q623	UN2213-X	DIGI TRANSISTOR	
R706	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	Q624	UN2213-X	DIGI TRANSISTOR DIGI TRANSISTOR	
R707 R708	NRSA63J-101X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 0Ω 1/16W J	Q625 Q626	UN2213-X UN2213-X	DIGI TRANSISTOR	
R709	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	Q627	2SD601A/QR/-X	TRANSISTOR	
R710	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	Q628	UN2213-X	DIGI TRANSISTOR	
1.004	0010441/0707	COII	27.4117	Q629 Q632	2SD601A/QR/-X 2SB709A/QR/-X	TRANSISTOR TRANSISTOR	
L001 L002	QQL244K-270Z QQL244K-100Z	COIL COIL	27uH K 10uH K	Q641	2SB709A/QR/-X	TRANSISTOR	
L003	QQL244K-100Z	COIL	10uH K	Q642	DTC323TK-X	DIGI TRANSISTOR	
L101	QRN143J-0R0X	C RESISTOR	0Ω 1/4W J	Q643 Q701	DTC323TK-X 2SB709A/QR/-X	DIGI TRANSISTOR TRANSISTOR	
L102	QQL244K-4R7Z	COIL	4.7uH K	Q701 Q702	2SD601A/QR/-X	TRANSISTOR	
CN001	QGB1505J1-35	CONNECTOR	B-B (1-35)				
CN002	QGC2507C1-96	CONNECTOR	(1-96)	D201	MA3120/M/-X	Z DIODE	
CN003 CN004	QGB1506L1-16 QGB1506L1-16	CONNECTOR CONNECTOR	B-B (1-16) B-B (1-16)	D202 D203	MA3120/M/-X MA3120/M/-X	Z DIODE Z DIODE	
CN004 CN005	QGB1506L1-16 QGB1506L1-16	CONNECTOR	B-B (1-16) B-B (1-16)	D204	MA3120/M/-X	Z DIODE	
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ÆRef No.	Part No.	Part Name	Description Local	ΔRef No.	Part No.	Part Name	Description Local
D205 D206 D207 D208 D209 D501 D502 D503 D504 D621 D622 D623 D624 D625 D626 D627 D628 D629 D630 D631 D633 D651 D652 D653 D701 D702 D703 D704 D705 D981 D982	MA3120/M/-X MA3120/M/-X MA3120/M/-X MA3120/M/-X MA3120/M/-X MA3120/M/-X MA111-X MA3330/L/-X MA3330/L/-X MA33056/M/-X MA3056/M/-X MA3056/M/-X MA3056/M/-X MA111-X MA111-X MA111-X MA111-X MA111-X	Z DIODE Z DIODE Z DIODE Z DIODE Z DIODE SI DIODE Z DIODE SI DIODE		C229 C230 C231 C232 C233 C234 C235 C236 C237 C238 C239 C303 C304 C308 C309 C310 C503 C504 C503 C504 C505 C5504 C515 C551 C551 C552 C553 C554 C554	QETN1HM-106Z QENC1EM-106Z QENC1EM-106Z QENC1EM-106Z QETN1CM-107Z QETN1CM-107Z NCB31HK-103X QETN1CM-477Z NCF31AZ-105X NCF31AZ-105X QETN1CM-477Z QETN1CM-477Z NCF31AZ-105X QETN1CM-477Z NCF31AZ-105X QETN1CM-477Z QETN1HM-106Z NCB31HK-103X NCB31CK-224X NCB31HK-102X NCB31CK-224X NCB31CK-104X NCB31CK-105X NCB31	E CAPACITOR BP E CAPACITOR BP E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C C C C C C C C C C C C C C C C C C C	10uF 50V M 10uF 25V M 10uF 25V M 10uF 16V M 100uF 16V M 0.01uF 50V K 100uF 16V M 470uF 16V M 470uF 16V M 1uF 10V Z 1uF 10V Z 1uF 10V Z 470uF 16V M 0.01uF 50V K 0.22uF 16V K 1000pF 50V K 0.22uF 16V K 1000pF 50V J 0.1uF 16V K 0.03uF 25V K 6800pF 50V J 0.1uF 16V K 0.02uF 16V Z 0.22uF 16V Z
C001 C002 C004 C005 C006 C007 C008 C009 C011 C012 C013 C101 C102 C103 C104 C105 C106 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C128 C130 C131 C131	NCB31HK-222X QETN1HM-106Z NCB31CK-104X QETN1CM-108Z NCB31HK-103X QETN1HM-106Z NCB31CK-104X QETN1HM-106Z QETN1HM-106Z NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31CK-104X QETN1HM-106Z NCB31CK-104X QETN1HM-106Z NCB31CK-104X NCB31CK-104X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HJ-2R0X NCB31HJ-2R0X NCB31HJ-2R0X NCB31HJ-102X NCB31HJ-102X NCB31HJ-102X NCB31HJ-102X NCB31CK-104X QETN1HM-106Z NCB31CK-104X QETN1HM-106Z NCB31CK-104X NCB31HJ-102X	C CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR	2200pF 50V K 10uF 50V M 0.1uF 16V K 1000uF 16V M 0.01uF 50V K 10uF 50V M 0.1uF 16V K 10uF 50V M 10uF 50V M 0.01uF 50V K 0.01uF 50V M 0.1uF 16V K 10uF 50V M 0.1uF 16V K 0.01uF 50V K 0.01uF 50V K 0.01uF 50V K 1000pF 50V J 1000pF 50V J 1000pF 50V M 0.1uF 16V K 10uF 50V M 0.1uF 16V K	C601 C602 C603 C604 C605 C606 C607 C608 C609 C610 C611 C623 C641 C642 C650 C651 C652 C654 C657 C663 C664 C665 C666 C701 C702 C901 C902 C903 C904 C905 C906 C907	QENC1HM-105Z QENC1HM-105Z QENC1HM-105Z QETN1CM-107Z NCB31HK-153X NCB31HK-222X NCB31HK-223X NCB31HK-223X NCB31HK-223X QENC1HM-105Z QENC1HM-105Z QETN1EM-108Z NCB31HK-103X NCB31HK-103X NCB31HK-103X NCB31HK-103X QETN1EM-106Z QETN1HM-106Z QETN1HM-106Z QETN1HM-106Z QETN1HM-106Z QETN1HM-106Z QETN1HM-107Z QETN1HM-106Z QETN1HM-107Z QETN1HM-106Z NCB31HK-104X NCB31CK-104X QETN1CM-107Z NCB31CK-104X QETN1CM-107Z NCB31CK-104X QETN1CM-107Z NCB31CK-104X QETN1CM-107Z NCB31CK-105X QETN1HM-106Z NCF31AZ-105X NDC31HJ-471X	BP E CAPACITOR BP E CAPACITOR E CAPACITOR C CAPACITOR BP E CAPACITOR BP E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR	1uF 50V M 1uF 50V M 1uF 50V M 100uF 16V M 0.015uF 50V K 2200pF 50V K 0.015uF 50V K 2200pF 50V K 0.022uF 50V K 0.022uF 50V K 1uF 50V M 1uF 50V M 1uF 50V M 100uF 25V M 0.01uF 50V K 0.01uF 50V M 10uF 50V M 0.1uF 16V K 100uF 16V M 0.1uF 16V K 100uF 16V M 1uF 10V Z 10uF 50V M
C201 C202 C203 C204 C205 C206 C207 C209 C210 C211 C212 C213 C215 C216 C219 C220 C221 C222 C223 C224 C225 C226 C227 C228	QETN1HM-106Z QETN1HM-106Z NCB31HK-103X NCF31AZ-105X NCF31AZ-105X QETN1HM-106Z NCF31AZ-105X NCB31HK-103X NCB31HK-102X NCB31HK-102X NCB31HK-102X NCF31AZ-105X QETN1HM-106Z NCF31AZ-105X QETN1HM-106Z QETN1HM-106Z QETN1HM-106Z QETN1HM-106Z NCF31AZ-105X NCB31HK-103X QETN1HM-106Z QETN1HM-106Z NCF31AZ-105X NCB31HK-103X QETN1HM-106Z NCF31AZ-105X NCB31HK-103X QETN1HM-106Z QETN1HM-106Z NCF31AZ-105X NCB31HK-103X	E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR	10uF 50V M 10uF 50V M 0.01uF 50V K 1uF 10V Z 1uF 10V Z 1uF 10V Z 1uF 10V Z 0.01uF 50V K 1000pF 50V K 1000pF 50V K 100F 50V M 1uF 10V Z 10uF 50V M	R002 R003 R006 R007 R008 R011 R101 R102 R105 R201 R202 R203 R204 R205 R206 R208 R209 R210 R211 R212 R213 R214 R215	NRSA63J-101X NRSA63J-101X NRSA63J-103X NRSA63J-103X NRSA63J-103X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-103X NRSA63J-103X NRSA63J-223X NRSA63J-223X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-222X NRSA63J-222X NRSA63J-333X NRSA63J-333X NRSA63J-333X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-101X	MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J 4.7kΩ 1/16W J 10kΩ 1/16W J 10kΩ 1/16W J 10kΩ 1/16W J 100Ω 1/16W J 100Ω 1/16W J 100Ω 1/16W J 10kΩ 1/16W J 20kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 33kΩ 1/16W J 33kΩ 1/16W J 33kΩ 1/16W J 33kΩ 1/16W J 100Ω 1/16W J 22kΩ 1/16W J

⚠Ref No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Local
R216 R217	NRSA63J-333X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J	R507 R509	NRSA63J-273X	MG RESISTOR MG RESISTOR	27kΩ 1/16W J
R217 R218	NRSA63J-222X NRSA63J-333X	MG RESISTOR	2.2kΩ 1/16W J 33kΩ 1/16W J	R509 R510	NRSA63J-123X NRSA63J-563X	MG RESISTOR	12kΩ 1/16W J 56kΩ 1/16W J
R219 R220	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R511 R512	NRSA63J-682X NRSA63J-153X	MG RESISTOR	6.8kΩ 1/16W J
R220 R221	NRSA63J-473X NRSA63J-823X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 82kΩ 1/16W J	R512 R513	NRSA63J-153X NRSA63J-332X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 3.3kΩ 1/16W J
R222	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	R514	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R223 R224	NRSA63J-473X NRSA63J-273X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 27kΩ 1/16W J	R515 R516	NRSA63J-333X NRSA63J-123X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 12kΩ 1/16W J
R225	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R517	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R226 R227	NRSA63J-473X NRSA63J-823X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 82kΩ 1/16W J	R518 R519	NRSA63J-153X NRSA63J-472X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 4.7kΩ 1/16W J
R228	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R520	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R229 R230	NRSA63J-153X NRSA63J-473X	MG RESISTOR MG RESISTOR	15kΩ 1/16W J 47kΩ 1/16W J	R521 R522	NRSA63J-473X NRSA63J-103X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 10kΩ 1/16W J
R231	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	R523	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J
R232 R233	NRSA63J-823X NRSA63J-823X	MG RESISTOR MG RESISTOR	82kΩ 1/16W J 82kΩ 1/16W J	R524 R525	NRSA63J-224X NRSA63J-223X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 22kΩ 1/16W J
R234	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R526	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J
R235 R236	NRSA63J-333X NRSA63J-222X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J 2.2kΩ 1/16W J	R527 R528	NRSA63J-563X NRSA63J-472X	MG RESISTOR MG RESISTOR	56kΩ 1/16W J 4.7kΩ 1/16W J
R237	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R529	NRSA63.J-823X	MG RESISTOR	82kΩ 1/16W J
R238 R239	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R530	NRSA63J-154X NRSA63J-472X	MG RESISTOR MG RESISTOR	150kΩ 1/16W J 4.7kΩ 1/16W J
R240	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R531 R532	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R241 R242	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R533 R534	NRSA63J-272X NRSA63J-682X	MG RESISTOR MG RESISTOR	2.7kΩ 1/16W J 6.8kΩ 1/16W J
R243	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R535	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J
R244 R245	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R536 R537	NRSA63J-224X NRSA63J-123X	MG RESISTOR MG RESISTOR	220kΩ 1/16W J 12kΩ 1/16W J
R246	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R538	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J
R247 R248	NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 33kΩ 1/16W J	R539 R551	NRSA63J-332X NRSA63J-124X	MG RESISTOR	3.3kΩ 1/16W J 120kΩ 1/16W J
R249	NRSA63J-333X NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R552	NRSA63J-100X	MG RESISTOR MG RESISTOR	120kΩ 1/16W J 10Ω 1/16W J
R250	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R553	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J
R251 R252	NRSA63J-473X NRSA63J-103X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J 10kΩ 1/16W J	R554 R555	NRSA63J-562X NRSA63J-154X	MG RESISTOR MG RESISTOR	5.6kΩ 1/16W J 150kΩ 1/16W J
R253	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	R556	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R254 R255	NRSA63J-223X NRSA63J-153X	MG RESISTOR MG RESISTOR	22kΩ 1/16W J 15kΩ 1/16W J	R557 R558	NRSA63J-100X NRSA63J-562X	MG RESISTOR MG RESISTOR	10Ω 1/16W J 5.6kΩ 1/16W J
R256	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R559	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R257 R258	NRSA63J-273X NRSA63J-823X	MG RESISTOR MG RESISTOR	27kΩ 1/16W J 82kΩ 1/16W J	R560 R601	NRSA63J-472X NRSA63J-333X	MG RESISTOR MG RESISTOR	4.7kΩ 1/16W J 33kΩ 1/16W J
R259	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	R602	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
R260 R261	NRSA63J-104X NRSA63J-391X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 390Ω 1/16W J	R603 R604	NRSA63J-103X NRSA63J-332X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 3.3kΩ 1/16W J
R262	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	R605	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R263 R264	NRSA63J-104X NRSA63J-101X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 100Ω 1/16W J	R606 R607	NRSA63J-102X NRSA63J-332X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 3.3kΩ 1/16W J
R265	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R608	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R266 R267	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R609 R610	NRSA63J-332X NRSA63J-101X	MG RESISTOR MG RESISTOR	3.3kΩ 1/16W J 100Ω 1/16W J
R268	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R611	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R269 R270	NRSA63J-101X NRSA63J-101X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 100Ω 1/16W J	R612 R613	NRSA63J-221X NRSA63J-221X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 220Ω 1/16W J
R271	NRSA63J-333X	MG RESISTOR MG RESISTOR	33kΩ 1/16W J	R621	NRSA63J-104X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J
R272 R273	NRSA63J-333X NRSA63J-222X	MG RESISTOR	33kΩ 1/16W J 2.2kΩ 1/16W J	R622 R623	NRSA63J-104X NRSA63J-223X	MG RESISTOR	100kΩ 1/16W J 22kΩ 1/16W J
R274	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R624	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R275 R276	NRSA63J-391X NRSA63J-391X	MG RESISTOR MG RESISTOR	390Ω 1/16W J 390Ω 1/16W J	R626 R627	NRSA63J-103X NRSA63J-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W J
R277	NRSA63J-101X NRSA63J-222X	MG RESISTOR	100Ω 1/16W J	R628	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R278 R279	NRSA63J-222X NRSA63J-562X	MG RESISTOR MG RESISTOR	2.2kΩ 1/16W J 5.6kΩ 1/16W J	R629 R630	NRSA63J-103X NRSA63J-822X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 8.2kΩ 1/16W J
R280	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R631	NRSA63J-473X NRSA63J-822X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J
R281 R282	NRSA63J-102X NRSA63J-102X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J 1kΩ 1/16W J	R632 R635	NRSA63J-822X NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J 8.2kΩ 1/16W J
R283	QRG01GJ-101	OMF RESISTOR	100Ω 1W J	R637	NRSA63J-473X	MG RESISTOR MG RESISTOR	47kΩ 1/16W J
R284 R285	QRK126J-181X NRSA63J-101X	UNF C RESISTOR MG RESISTOR	180Ω 1/2W J 100Ω 1/16W J	R638 R641	NRSA63J-273X NRSA63J-104X	MG RESISTOR	27kΩ 1/16W J 100kΩ 1/16W J
R286	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R642	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J
R287 R288	QRK126J-151X NRSA63J-750X	UNF C RESISTOR MG RESISTOR	150Ω 1/2W J 75Ω 1/16W J	R643 R644	NRSA63J-681X NRSA63J-103X	MG RESISTOR MG RESISTOR	680Ω 1/16W J 10kΩ 1/16W J
R289	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R645	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R290 R291	NRSA63J-101X NRSA63J-750X	MG RESISTOR MG RESISTOR	100Ω 1/16W J 75Ω 1/16W J	R650 R651	NRSA63J-103X NRSA63J-473X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 47kΩ 1/16W J
R311	QRK126J-391X	UNF C RESISTOR	390Ω 1/2W J	R652	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R312 R313	NRSA63J-680X QRK126J-391X	MG RESISTOR UNF C RESISTOR	68Ω 1/16W J 390Ω 1/2W J	R653 R654	NRSA63J-104X NRSA63J-104X	MG RESISTOR MG RESISTOR	100kΩ 1/16W J 100kΩ 1/16W J
R314	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R315 R501	NRSA63J-680X NRSA63J-223X	MG RESISTOR MG RESISTOR	68Ω 1/16W J 22kΩ 1/16W J	R657 R661	NRSA63J-103X NRSA63J-183X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 18kΩ 1/16W J
R502	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	R702	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R503 R504	NRSA63J-123X NRSA63J-123X	MG RESISTOR MG RESISTOR	12kΩ 1/16W J 12kΩ 1/16W J	R703 R704	NRSA63J-221X NRSA63J-221X	MG RESISTOR MG RESISTOR	220Ω 1/16W J 220Ω 1/16W J
R505	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	R705	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R506	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	R706	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J

∆Ref No.	Part No.	Part Name	Description Local	ΔRef No.	Part No.	Part Name	Description Local
R707 R708 R709 R710 L001 L002 L003 L101 L102	NRSA63J-101X NRSA63J-0R0X NRSA63J-222X NRSA63J-104X QQL244K-270Z QQL244K-100Z QQL244K-100Z QRN143J-0R0X QQL244K-4R7Z	MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR COIL COIL C RESISTOR C RESISTOR	100Ω 1/16W J 0Ω 1/16W J 2.2kΩ 1/16W J 100kΩ 1/16W J 27uH K 10uH K 10uH K 0Ω 1/4W J 4.7uH K	D582 D583 D584 D901 D902 D904 D905 D906 D907 D910	MTZJ7.5B-T2 MTZJ7.5S-T2 RGP10J-5025-T3 D3SB60 RG1C-LFA1 EU2-T2 1SS133-T2 MTZJ27B-T2 1SS133-T2 MTZJ15B-T2	Z DIODE Z DIODE SI DIODE BRIDGE DIODE SI DIODE FR DIODE SI DIODE SI DIODE SI DIODE Z DIODE Z DIODE Z DIODE Z DIODE	
CN001 CN002 CN003 CN004 CN005 CN00B CN00F CN00K CN00R CN0C1 CN0SL CN0SR HS651 J001 K101	QGE2547(-517)2 QGB1505J1-35 QGC2507C1-96 QGB1506L1-16 QGB1506L1-16 QJK002-042214 QGA2501C1-12 QGA2501C1-12 QGA2501C1-10 QGA2501C5-05Z QGA2501C5-04Z QGA2501C5-03Z LC30145-003A QNN0296-001 NQR0389-003X	CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR SIN CR C-B WIRE CONNECTOR HEAT SINK/AL-F/ PIN JACK FERRITE BEADS	H-7 GITK  B-B (1-35) (1-96) B-B (1-16) B-B (1-16) B-B (1-16) W-B (1-10) W-B (1-5) W-B (1-10) W-B (1-6) W-B (1-4) W-B (1-3)  AUDIO OUT	D911 D931 D941 D945 D951 D952 D953 D954 D956 D958 D959 D981 D982 D983	MTZJ15B-T2 S1WB/A/60-4101 1SR124-400A-T2 1SS133-T2 RU4AM-LFT2 RGP10J-5025-T3 FMX-G12S MTZJ33B-T2 1SS133-T2 1SS133-T2 1SS133-T2 1SS133-T2	Z DIODE BRIDGE DIODE SI DIODE	
K102 K641 K642 LC101 TU001 W101 W102 W103 W104 W108 W109 X101 Y001 Y001 Y603	NQR0389-003X NQR0199-001X NQR0199-001X NQR0431-001X QAU0277-001 NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X	FERRITE BEADS FERRITE BEADS FERRITE BEADS FERRITE BEADS EMI FILTER TUNER MG RESISTOR X TAL MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR	$\begin{array}{c} 0.22 \text{uF} \ 50 \text{V} \ Z \\ 0\Omega \ 1/16 \text{W} \ \text{J} \\ 0\Omega \ 1/16 \text{W} \ J$	C404 C405 C406 C408 C409 C410 C411 C414 C461 C462 C463 C464 C465 C466 C467 C468	QCZ0120-104Z QDC31HJ-820Z QETM1VM-108 QETN1VM-337Z QFVF1HJ-474Z QFVF1HJ-474Z QFLC2AJ-104Z QCB31HK-682Z QEZ0414-226 QFM72DJ-152Z QFM72DJ-122Z QCZ0120-104Z QETN1HM-106Z QFP31HJ-272Z QFLC1HJ-102Z QETN1EM-476Z QCS31HJ-470Z	C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR MF CAPACITOR MF CAPACITOR MF CAPACITOR C CAPACITOR BP E CAPACITOR M CAPACITOR M CAPACITOR C CAPACITOR M CAPACITOR M CAPACITOR E CAPACITOR M CAPACITOR C CAPACITOR	0.1uF 25V Z 82pF 50V J 1000uF 35V M 330uF 35V M 0.47uF 50V J 0.1uF 100V J 6800pF 50V K 22uF 50V M 1500pF 200V J 1200pF 200V J 0.1uF 25V Z 10uF 50V M 2700pF 50V J 1000pF 50V J 47uF 25V M
POWER   ⚠Ref No.	R & DEF PW B Part No.	OARD ASS'Y (S Part Name	ML-2002A-U2)  Description Local	C471 C481 C501 C502	QFLC1HJ-103Z QETN1HM-105Z QCB32HK-331Z QFM72DK-103	M CAPACITOR E CAPACITOR C CAPACITOR M CAPACITOR	0.01uF 50V J 1uF 50V M 330pF 500V K 0.01uF 200V K
IC401 IC461 IC901 AIC941 IC951 IC961 IC962	LA78041 BA10393 STR-F6267S-F7 QAL0425-001 SE140N L7812CP L7809CP	IC IC IC POWER TRANSF IC IC		C503 C521 C522 C523 C524 C526 C527 C529	QFVF1HJ-224Z QFZ0122-112 QFZ0200-113 QFM72DK-393 QFP32JJ-223 QFZ0197-184 QFZ0197-124 QFZ0197-154	MF CAPACITOR MPP CAPACITOR MPP CAPACITOR M CAPACITOR PP CAPACITOR MPP CAPACITOR MPP CAPACITOR MPP CAPACITOR MPP CAPACITOR	0.22uF 50V J 1100pF 1.8kV H 0.011uF 1.5kV H 0.039uF 200V K 0.022uF 630V J 0.18uF 250V J 0.12uF 250V J 0.15uF 250V J
Q461 Q462 Q463 Q464 Q481 Q482 Q501 ⚠Q521 Q581 Q582 Q583 Q941 Q942	2SK2459N-F54 KTC3199/YG/-T KTC3199/YG/-T KTA1267/YG/-T DTC124ESA-T KTC3199/YG/-T BSN304-T 2SC5857-LB 2SA1208/ST/Z1-T DTC144ESA-T KTC3199/YG/-T KTC3199/YG/-T KTC3199/YG/-T	POWER MOS FET TRANSISTOR TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR MOS FET POW TRANSISTOR TRANSISTOR DIGI TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		C530 C531 C532 C533 C541 C551 C552 C553 C554 C555 C556 C558 C558	QCB32HK-561Z QFZ0194-534 QETM2CM-227 QETM2CM-475Z QENC1HM-105Z QCB32HK-152Z QETN1CM-108Z QCB32HK-152Z QETN1CM-108Z QCB32HK-152Z QETN2CM-106Z QETN2CM-106Z QETN1CM-476Z QETN1CM-476Z QETN1CM-476Z	C CAPACITOR MPP CAPACITOR E CAPACITOR E CAPACITOR BP E CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR	560pF 500V K 0.53uF 250V J 220uF 160V M 4.7uF 250V M 1uF 50V M 1500pF 500V K 1000uF 16V M 1500pF 500V K 1000uF 16V M 1000pF 500V K 1000pF 500V K 10uF 250V M 470uF 16V M
D402 D461 D462 D463 D481 D501 D521 D522 D523 D525 D541 D542 D551 D552 D553	1SR35-400A-T2 RGP10J-5025-T3 1SS133-T2 1SS133-T2 1SS133-T2 1SS81-T5 V11CA-C1 FMV-3FU-F1 MTZJ22B-T2 RGP10J-5025-T3 RGP10J-5025-T3 MTZJ3.9B-T2 RGP10J-5025-T3 RGP10J-5025-T3 RGP10J-5025-T3 RGP10J-5025-T3 RH1S-T3	SI DIODE Z DIODE SI DIODE		C583 C584 AC901 AC902 AC903 AC904 AC905 AC906 C907 C908 C909 C910 C911 C912 C914 C915	QETN2AM-106Z QETN1AM-227Z QFZ9075-473 QFZ9075-104 QFZ9075-473 QCZ9054-472 QCZ9054-472 QCZ9054-472 QEZ0199-227 QCB32HK-103 QCZ0340-391 QETN1HM-476Z QCB31HK-102Z QCZ0340-561 QCB31HK-102Z QCB31HK-152Z	E CAPACITOR E CAPACITOR MPP CAPACITOR MPP CAPACITOR MPP CAPACITOR C CAPACITOR	10uF 100V M 220uF 10V M 0.047uF AC275V M 0.1uF AC275V M 0.047uF AC275V M 4700pF AC250V Z 4700pF AC250V Z 220uF 250V J 0.01uF 500V K 390pF 2kV K 47uF 50V M 1000pF 50V K 560pF 2kV K 220pF 50V K 0.1uF 50V J 1500pF 50V K

ÆRef No.	Part No.	Part Name	Description Local	ΔRef No.	Part No.	Part Name	Description Local
⚠C931 ⚠C932 ⚠C933 C934 C941 C942	QCZ9054-472 QCZ9054-472 QCZ9054-472 QETM2GM-226 QTMN1CM-477Z QETN1AM-337Z	C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR	4700pF AC250V Z 4700pF AC250V Z 4700pF AC250V Z 22uF 400V M 470uF 16V M 330uF 10V M	R951 R952 R981 R982 △R991	QRE121J-222Y QRL039J-223 QRE141J-153Y QRE141J-102Y QRZ9046-825Z	C RESISTOR OMF RESISTOR C RESISTOR C RESISTOR C RESISTOR	2.2kΩ 1/2W J 22kΩ 3W J 15kΩ 1/4W J 1kΩ 1/4W J 8.2MΩ 1/2W K
C951 C952 C953 C954 C956 C957 C959 C960 ▲C991	QEZ0203-227 QETN1CM-108Z QEHR1CM-227Z QETM1VM-228 QETM1AM-108Z QETN1AM-477Z QFVF1HJ-684Z QCZ0325-821 QCZ9079-222 QCZ9079-471	E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR	220uF 160V M 1000uF 16V M 220uF 16V M 220uF 35V M 1000uF 10V M 470uF 10V M 0.68uF 50V J 820pF 2kV K 2200pF AC250V M 470pF AC250V K	L461 L462 L521 L522 L551 L901 L902 L903 L941 L942	QQR1195-001 QQLZ028-272 QQLZ031-180 QQR1191-002 QQLZ026-540 QQL401K-100Z QQL401K-100Z QQR1200-001 QQL26AM-4R7Z QQL26AK-220Z	CHOKE COIL COIL LINEARITY COIL COIL COIL COIL COIL CHOKE COIL COIL COIL COIL	2.7mH 18uH 54uH ±7% 10uH K 10uH K 4.7uH M 22uH K
R401 R402 R403	QRE141J-562Y QRE141J-562Y QRE141J-222Y	C RESISTOR C RESISTOR C RESISTOR	5.6kΩ 1/4W J 5.6kΩ 1/4W J 2.2kΩ 1/4W J	L951 T501 △T901	QQLZ026-460 QQR1111-001 QQS0195-001	COIL DRIVE TRANSF SW TRANSF	46uH ±7%
R404 R405 R406 R407 R408 R409 R410 R461 R462 R463 R464 R468 R469 R471 R472 R473 R474 R475 R477 R478 R476 R477	QRX01GJ-1R0 QRL029J-151 QRE141J-222Y QRX01GJ-1R5 QRX01GJ-1R5 QRE141J-823Y QRE141J-103Y QRG029J-820 QRE141J-473Y QRA14CF-9101Y QRX01GJ-2R7 QRE141J-102Y QRE141J-391Y QRA14CF-1002Y QRE141J-473Y QRE141J-473Y QRE141J-102Y QRE141J-103Y QRE141J-103Y QRE141J-103Y QRE141J-103Y QRE141J-103Y QRE141J-103Y QRE141J-103Y	MF RESISTOR OMF RESISTOR C RESISTOR MF RESISTOR MF RESISTOR C RESISTOR	1Ω 1W J 150Ω 2W J 2.2kΩ 1/4W J 1.5Ω 1W J 1.5Ω 1W J 1.5Ω 1W J 82kΩ 1/4W J 10kΩ 1/4W J 82Ω 2W J 47kΩ 1/4W J 9.1kΩ 1/4W J 2.7kΩ 1/4W J 2.7kΩ 1/4W J 390Ω 1/4W J 10kΩ 1/4W J	CN003 CN004 CN005 CN006 CN00W CN00X CN0HV &CP951 &CP952 &CP954 HS401 HS421 HS521 HS522 HS901 HS956 K401 K522 K523 K524 K901 &R901 &R941	QGB1506M1-16 QGB1506M1-16 QGB1506M1-16 QGB2501C5-06Z QGA7901C1-02 QGA2501C5-05Z CHC802T-05N-J ICP-N75-Y ICP-N75-Y ICP-N75-Y QMFZ034-4R0Z-J1 LC30416-002A CEHT11B-002QS LC31212-001B CEHT11B-006QS LC30774-001A CEHT11B-002QS QQR0621-002Z CE41832-001 CE41832-001 CE41832-001 QQR0679-001 QQR1095-001 QSK00099-001	CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR CONNECTOR LV CONNECTOR IC PROTECTOR IC PROTECTOR IC PROTECTOR IC PROTECTOR HEAT SINK/AL-F/ HEAT SINK/AL-F/ HEAT SINK/AL-F/ HEAT SINK HEA	B-B (1-16) B-B (1-16) B-B (1-16) W-B (1-6) W-B (1-2) W-B (1-5)  2.7A 2.7A 4A 125V
R502 R503 R504 R505 R506	QRE141J-123Y QRE121J-152Y QRL039J-272 QRL039J-332 QRE121J-5R6Y	C RESISTOR C RESISTOR OMF RESISTOR OMF RESISTOR C RESISTOR	12kΩ 1/4W J 1.5kΩ 1/2W J 2.7kΩ 3W J 3.3kΩ 3W J 5.6Ω 1/2W J	TH901	QAD0133-9R0	PTHERMISTOR  DARD ASS'Y (SM	9Ω 220V/240V <b>L-3002A-U2)</b>
R521 R522 R523 R524	QRE121J-471Y QRE141J-223Y QRE141J-103Y	C RESISTOR C RESISTOR C RESISTOR	470Ω 1/2W J 22kΩ 1/4W J 10kΩ 1/4W J	Ref No.	Part No.	Part Name	Description Local
R525 R541 R542 R543	QRC121K-152Z QRL039J-103 QRE141J-182Y QRE141J-222Y QRE121J-272Y	COMP RESISTOR OMF RESISTOR C RESISTOR C RESISTOR C RESISTOR C RESISTOR	1.5kΩ 1/2W K 10kΩ 3W J 1.8kΩ 1/4W J 2.2kΩ 1/4W J 2.7kΩ 1/2W J	IC3201 IC3202 IC3203	TDA6111Q TDA6111Q TDA6111Q	IC IC IC	
⚠R551 ⚠R552 R581 R582 R583 R584 R585 R586	QRZ9022-R47 QRZ9022-R47 QRF154K-4R7 QRE141J-681Y QRE141J-183Y QRE141J-122Y QRA14CF-7501Y	FUSI RESISTOR FUSI RESISTOR UNF WW RESISTOR C RESISTOR C RESISTOR C RESISTOR C RESISTOR CMF RESISTOR	0.47Ω 1W K 0.47Ω 1W K 4.7Ω 15W K 680Ω 1/4W J 6.8kΩ 1/2W J 18kΩ 1/4W J 2.2kΩ 1/4W J 7.5kΩ 1/4W F	Q3104 Q3105 Q3108 Q3109 Q3301 Q3303 Q3304	2SD601A/QR/-X 2SC1627A/OY/-T 2SA1837 2SC4793 2SB709A/QR/-X 2SB709A/QR/-X 2SD601A/QR/-X	TRANSISTOR TRANSISTOR POW TRANSISTOR POW TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
R586 R587 R588 ▲R591 R901 R902 R903 R904 R905 R906 R908 R909 R910 R911 R914 R915 R916 R941	QRA14CF-73011 QRA14CF-2101Y QRE141J-103Y QRZ9017-4R7 QRE121J-331Y QRF054K-3R3 QRF104K-3R9 QRL039J-683 QRE121J-474Y QRE121J-474Y QRE121J-474Y QRL039J-823 QRL039J-823 QRE121J-100Y QRE121J-332Y QRM059J-R10 QRE121J-152Y QRE121J-152Y QRE141J-1R0Y QRE141J-1R5Y	CMF RESISTOR C RESISTOR FUSI RESISTOR C RESISTOR UNF WW RESISTOR UNF WW RESISTOR OMF RESISTOR C RESISTOR C RESISTOR OMF RESISTOR OMF RESISTOR C RESISTOR	7.3 kΩ 1/4W F 2.1 kΩ 1/4W F 10 kΩ 1/4W J 4.7Ω 1/4W J 330Ω 1/2W J 3.3Ω 5W K 3.9Ω 10W K 68 kΩ 3W J 470 kΩ 1/2W J 470 kΩ 1/2W J 82 kΩ 3W J 82 kΩ 3W J 10Ω 1/2W J 3.3 kΩ 1/2W J 0.1Ω 5W J 220Ω 1/2W J 1.5 kΩ 1/2W J 1Ω 1/4W J 1.5 Ω 1/4W J	D3102 D3103 D3104 D3201 D3202 D3203 D3204 D3205 D3206 D3207 D3208 D3209 D3210 D3301 D3302 D3303 D3306	MA111-X RH1S-T3 RH1S-T3 EU01N-T2 EU01N-T2 EU01N-T2 RM2C-LFA1 1SR124-400A-T2 1SR124-400A-T2 MA3062/M/-X MA3130/H/-X MA3130/H/-X MA111-X MA111-X MA3036-X	SI DIODE Z DIODE Z DIODE Z DIODE SI DIODE	
R943 R944 R945 R946	QRE141J-1R8Y QRE141J-103Y QRE141J-563Y QRE141J-103Y	C RESISTOR C RESISTOR C RESISTOR C RESISTOR	1.8Ω 1/4W J 10kΩ 1/4W J 56kΩ 1/4W J 10kΩ 1/4W J	C3106 C3107 C3110	QETN1HM-335Z QETN1CM-107Z QETN2CM-106Z	E CAPACITOR E CAPACITOR E CAPACITOR	3.3uF 50V M 100uF 16V M 10uF 160V M

Ref No.	Part No.	Part Name	Description Local
C3111 C3113 C3114 C3116 C3117 C3118 C3120 C3201 C3202 C3203 C3204 C3205 C3206 C3207 C3208 C3209 C3211 C3212 C3213 C3214 C3215 C3216 C3218 C3221 C3222 C3223 C3224 C3301 C3302	QCB32HK-472Z QETN2CM-106Z QCB32HK-472Z QETN1AM-107Z QETN1AM-107Z QETN1AM-337Z NDC31HJ-561X NDC31HJ-8R0X NDC31HJ-8R0X NDC31HJ-8R0X NCF31CZ-104X NCF31CZ-104X NCF31CZ-104X QETN1EM-476Z QETN1EM-476Z QETN1EM-476Z QETN1EM-476Z QFK62EK-104Z QFK62EK-106Z QFTN2EM-106Z QETN2EM-106Z QETN2EM-106Z QETN1CM-107Z	C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR E CAPACITOR MM CAPACITOR MM CAPACITOR MM CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR MM CAPACITOR MM CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR	4700PF 500V K 10uF 160V M 4700PF 500V K 100uF 10V M 100uF 10V M 100uF 10V M 330uF 10V M 5600PF 50V J 80PF 50V J 80PF 50V J 80PF 50V J 0.1uF 16V Z 0.1uF 16V Z 0.1uF 16V Z 0.1uF 16V Z 0.1uF 25V M 47uF 25V M 47uF 25V M 0.1uF 250V K 0.1uF 250V M 0.1uF 250V M 0.1uF 250V M 0.1uF 250V M 100uF 16V M 33uF 250V M 0.022uF 1.25KV M 10uF 250V M 10uF 16V M
R3103 R3109 R3112 R3114 R3115 R3116 R3117 R3122 R3124 R3125 R3126 R3127 R3128 R3129 R3130 R3131 R3132 R3133  AR3134 R3201 R3202 R3203 R3208 R3209 R3208 R3201 R3202 R3203 R3208 R3209 R3218 R3219 R3220 R3223 R3224 R3225 R3223 R3224 R3225 R3228 R3229 R3230 R3218 R3219 R3220 R3230 R3200	NRSA63J-101X NRSA63J-153X NRSA63J-153X NRSA63J-152X NRSA63J-152X NRSA63J-152X NRSA63J-360X QRG01GJ-101 NRSA63J-312X QRE121J-563Y NRSA63J-470X QRE121J-563Y NRSA63J-470X QRE121J-563Y NRSA63J-470X QRE121J-2R7Y QRE121J-2R7Y QRE121J-2R7Y QRE3121J-2R7Y QRE421J-2R7Y NRSA63J-390X QRE121J-2R7Y NRSA63J-390X NRSA63J-121X QRL029J-681 QRZ9021-561 NRSA63J-102X NRSA63J-104-F QRL029J-104-F QRC121K-152Z QRC121K-152Z QRC121K-152Z QRC121K-152Z QRC121K-152Z QRC121K-152Z QRC121K-102Z QRS0107-105Z NRSA63J-332X NRSA63J-562X NRSA63J-562X NRSA63J-562X NRSA63J-562X NRSA63J-562X NRSA63J-223X NRSA63J-392X NRSA63J-392X NRSA63J-392X NRSA63J-392X NRSA63J-392X NRSA63J-392X NRSA63J-392X NRSA63J-300X	MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR OMF RESISTOR MG RESISTOR COMP RESISTOR MG RESISTOR	100Ω 1/16W J 15kΩ 1/16W J 2.7kΩ 1/16W J 2.7kΩ 1/16W J 1.5kΩ 1/16W J 1.5kΩ 1/16W J 100Ω 1W J 330Ω 1/16W J 1.2kΩ 1/16W J 56kΩ 1/2W J 47Ω 1/16W J 56kΩ 1/2W J 47Ω 1/16W J 2.7Ω 1/2W J 2.7Ω 1/2W J 2.7Ω 1/2W J 2.7Ω 1/16W J 680Ω 2W J 560Ω 1W J 1kΩ 1/16W J 16W J 176W J 2.7kΩ 1/16W J 2.7kΩ 1/16W J 2.7kΩ 1/16W J 3.3kΩ 1/16W J 3.3kΩ 1/16W J 1.5kΩ 1/2W K 1.5kΩ 1/2W J 3.3kΩ 1/16W J 5.6kΩ 1/16W J

⚠Ref No.	Part No.	Part Name	Description Local
R3311 R3312 R3313	NRSA63J-101X NRSA63J-120X NRSA63J-331X	MG RESISTOR MG RESISTOR MG RESISTOR	100Ω 1/16W J 12Ω 1/16W J 330Ω 1/16W J
L3204	QQL26AJ-102Z	COIL	1mH J
CN300G CN300R CN30E1 CN30SC CN30WM HS3101 HS3102 HS3201 HS3203 K3101 K3103 K3104 K3105 K3201 K3201 SG3202 SG3201 SG3202 SG3203 ASK3001 Y3101	QJK002-063631 CHGY0146-0A CE41507-001P QGZ0017C1-01Z QGA2501C5-03Z CEHP00N-001QS CEHP00N-001QS LC31150-002A LC31150-002A LC31150-002A CE41492-001Z CE41492-001Z CE41492-001Z QQR0679-001 QQR0679-001 QQR0679-001 QAF0056-501Z QAF0056-501Z QAF0056-501Z QNZ0536-001 NRSA63J-0R0X	SIN CR C-B WIRE CONNECTOR ASSY LV CONNECTOR CONNECTOR CONNECTOR HEAT SINK HEAT SINK HEAT SINK/AL-F/ HEAT SINK/AL-F/ CHOKE COIL CHOKE COIL CHOKE COIL FERRITE BEADS FERRITE BEADS FERRITE BEADS SURGE ABSORBER SURGE ABSORBER SURGE ABSORBER CRT SOCKET MG RESISTOR	(1-1) W-B (1-3) 500V M 500V M 500V M 0Ω 1/16W J

# FRONT CONTROL PW BOARD ASS'Y (SML-8001A-U2)

⚠Ref No.	Part No.	Part Name	Description Local
IC8851	GP1UM281QK	IR DETECT UNIT	38kHz
Q8801	UN2112-X	DIGI TRANSISTOR	
Q8802	UN2112-X	DIGI TRANSISTOR	
Q8803	UN2212-X	DIGI TRANSISTOR	
D8801	SPR-39MVWF	LED	RED-GREEN
D8851	MA3068/M/-X	Z DIODE	
C8851	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C8852	QETN1CM-107Z	E CAPACITOR	100uF 16V M
△C8901	QFZ9072-474	MM CAPACITOR	0.47uF AC250V K
R8801	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J
R8802	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J
R8804	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R8851	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
CN800B CN800W CN80PW ⚠F8901 FC8901 FC8902 ⚠LF8901	QGA2501C5-04Z WJK0050-002A QGAB801C1-02 QMF51D2-3R15J1 CEMG002-001Z CEMG002-001Z QQR1095-001	CONNECTOR E-SI C WIRE C-B CONNECTOR FUSE FUSE CLIP FUSE CLIP LINE FILTER	W-B (1-4) W-B (1-2) 3.15A AC250V
<b>∆</b> \$8901	QSW0824-001	PUSH SWITCH	POWER
W8001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

## SIDE CONTROL PW BOARD ASS'Y (SML-8101A-U2)

⚠Ref No.	Part No.	Part Name	Description Local
C8001 C8002 C8003 C8004 C8310 C8311 C8321	NCB31HK-103X NCB31HK-103X NCB31HK-102X NCB31HK-102X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31CK-104X	C CAPACITOR	0.01uF 50V K 0.01uF 50V K 1000pF 50V K 1000pF 50V K 4700pF 50V K 4700pF 50V K 0.1uF 16V K
R8001 R8002 R8021 R8022 L8001	QRE121J-271Y QRE121J-271Y NRSA63J-102X NRSA63J-102X QQR0716-001Z	C RESISTOR C RESISTOR MG RESISTOR MG RESISTOR FERRITE BEADS	270Ω 1/2W J 270Ω 1/2W J 1kΩ 1/16W J 1kΩ 1/16W J

Ref No.	Part No.	Part Name	Description Local	⚠Ref No.	Part No.	Part Name	Description Local
L8002 L8003 L8310 L8311 L8312	QQL244K-5R6Z QQL244K-5R6Z QQL244K-270Z QQL244K-270Z QQR0716-001Z	COIL COIL COIL COIL FERRITE BEADS	5.6uH K 5.6uH K 27uH K 27uH K	Q203 Q301 Q302 Q304 Q305 Q306	2SB709A/QR/-X 2SB709A/QR/-X 2SD601A/QR/-X 2SC4672/PQ/-W 2SB709A/QR/-X 2SB709A/QR/-X	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
CN800F CN800K J8001 J8303 S8001 S8002 S8003	QGA2501C1-12 QGA2501C5-05Z QMS3001-C01 QNZ0438-001 QSW0619-003Z QSW0619-003Z QSW0619-003Z	CONNECTOR CONNECTOR 3.5 JACK AV JACK TACT SWITCH TACT SWITCH TACT SWITCH	W-B (1-12) W-B (1-5) HEADPHONE V-IN CH DOWN MENU CH UP	Q307 QA001 QA002 QA003 QA004 QA301 QA302	2SB709A/QR/-X UMX1N-W UMX1N-W UMX1N-W UMT1N-W UMX1N-W UMT1N-W	TRANSISTOR PAIR TRANSISTOR	
AV .IAC	CK PW BOARD	ASS'Y (SML0J	001Δ <b>-</b> 112)	D001 D002 D003	MA111-X MA111-X MA3068/M/-X	SI DIODE SI DIODE Z DIODE	
⚠Ref No.	Part No.	Part Name	Description Local	D005 D301 D302	RSA6.1J4-W DA221-X DA221-X	SI DIODE DIODE ARRAY DIODE ARRAY	
D0101 D0102 D0103 D0104 D0115	MA3056/M/-X MA3056/M/-X MA3056/M/-X MA3056/M/-X MA3056/M/-X	Z DIODE Z DIODE Z DIODE Z DIODE Z DIODE Z DIODE		D303 D304 D305 D306	DA221-X DA221-X MA111-X DA221-X NCB31HK-104X	DIODE ARRAY DIODE ARRAY SI DIODE DIODE ARRAY C CAPACITOR	0.1uF 50V K
D0116 D0117 D0118 D0119	MA3056/M/-X MA3056/M/-X MA3056/M/-X MA3056/M/-X	Z DIODE Z DIODE Z DIODE Z DIODE		C019 C020 C021 C022	NEH71CM-476X NCB31HK-104X NEH71CM-476X NCF31AZ-105X	E CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR	47uF 16V M 0.1uF 50V K 47uF 16V M 1uF 10V Z
C0101 C0102 C0103 C0104 C0105 C0106 C0107 C0108 C0109 C0110	NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X NCB31HK-472X	C CAPACITOR	4700pF 50V K 4700pF 50V K	C023 C024 C025 C026 C027 C028 C029 C030 C031 C032 C034	NCB31EK-333X NCB31HK-104X NCB31EK-333X NCB31HK-104X NEH71CM-476X NEH71CM-476X NDC31HJ-151X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X	C CAPACITOR C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR	0.033uF 25V K 0.1uF 50V K 0.033uF 25V K 0.1uF 50V K 47uF 16V M 47uF 16V M 150pF 50V J 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K
R0101 R0102 R0103 R0104 R0105 R0106 R0107 R0108 R0109 R0203 R0204 R0205	NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X NRSA63J-750X	MG RESISTOR	75Ω 1/16W J 75Ω 1/16W J	C035 C036 C037 C038 C039 C040 C041 C042 C043 C045 C046 C047 C048	NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NDC31HJ-330X NDC31HJ-270X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X	C CAPACITOR E CAPACITOR	0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 33pF 50V J 27pF 50V J 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K
CN0001 J0001 J0002 W0101 W0102 W0103 W0104	QGB1505K1-35 QNZ0465-001 QNZ0463-001 NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X	CONNECTOR 21P CONNECTOR 21P CONNECTOR MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR	B-B (1-35) EXT-2 EXT-1 0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J	C049 C050 C051 C052 C053 C054 C055 C056 C057	NCB31HK-104X NCB31HK-104X NEH71CM-476X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X NCB31HK-104X	C CAPACITOR C CAPACITOR E CAPACITOR C CAPACITOR E CAPACITOR	0.1uF 50V K 0.1uF 50V K 47uF 16V M 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K 0.1uF 50V K
100Hz I	PW BOARD AS	SS'Y (SML0Z002	2A-U2)	C060 C061 C062	NEH71CM-106X NEH71CM-106X NRSA63J-0R0X	E CAPACITOR E CAPACITOR MG RESISTOR	10uF 16V M 10uF 16V M 0Ω 1/16W J
∆Ref No.	Part No.	Part Name	Description Local	C066 C067 C191	NCB31HK-104X NCB31HK-104X NEH71CM-476X	C CAPACITOR C CAPACITOR E CAPACITOR	0.1uF 50V K 0.1uF 50V K 47uF 16V M
IC001 IC002 IC003 IC004 IC191 IC201 IC301 IC901 IC902 IC903 Q013 Q013 Q014 Q101	SDA6000-B12 S-80828CNNB-W K4S641632F-TC75 MBV160T90PT PQ2L3252MS-X VSP9415B-VK-C1 DDP3315C-QA-D2 R1170H181B-X MM1563DF-X MM1565AF-X 2SK1830-X 2SK1830-X 2SR6014/0R/-X	IC IC IC(DIGITAL) IC(MICRO C ROM) IC		C192 C193 C194 C195 C196 C197 C201 C202 C203 C204 C205 C206 C207 C208	NCB11CK-225X NCB11CK-225X NCB31CK-104X NCB31CK-104X NCB11CK-225X NEH70GM-227X NDC31HJ-331X NDC31HJ-331X NDC31HJ-331X NCB31HK-104X NCB31HK-473X NCB31HK-473X NCB31HK-473X NCB31HK-473X NCB31HK-473X	C CAPACITOR C CAPACITOR C CAPACITOR E CAPACITOR E CAPACITOR C CAPACITOR	2.2uF 16V K 2.2uF 16V K 0.1uF 16V K 100uF 6.3V M 2.2uF 16V K 220uF 4V M 330pF 50V J 330pF 50V J 330pF 50V J 0.1uF 50V K 0.047uF 50V K 0.047uF 50V K 0.047uF 50V K 1uF 10V Z
Q101 Q201 Q202	2SD601A/QR/-X 2SB709A/QR/-X 2SB709A/QR/-X	TRANSISTOR TRANSISTOR TRANSISTOR		C209 C210 C211	NCB31HK-473X NCF31AZ-105X NCB31HK-473X	C CAPACITOR C CAPACITOR C CAPACITOR	0.047uF 50V K 1uF 10V Z 0.047uF 50V K

ÆRef No.	Part No.	Part Name	Description Local	ÆRef No.	Part No.	Part Name	Description Local
C212	NCB31HK-473X	C CAPACITOR	0.047uF 50V K	R030	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C213	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R032	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C214	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	R034	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C215	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R035	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C219	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R036	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C220	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R037	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C221	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R038	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C222	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R042	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C223	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R043	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C224	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R044	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C225	NDC31HJ-220X	C CAPACITOR	22pF 50V J	R054	NRSA63J-390X	MG RESISTOR	39Ω 1/16W J
C226 C227	NDC31HJ-220X	C CAPACITOR C CAPACITOR	22pF 50V J 1uF 10V Z	R055 R057	NRSA63J-0R0X NRSA63J-0R0X	MG RESISTOR MG RESISTOR	0Ω 1/16W J
C228	NCF31AZ-105X NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R058	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J 0Ω 1/16W J
C229	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R059	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C230	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R060	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C231	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C301	NEH71HM-105X	E CAPACITOR	1uF 50V M	R087	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C303	NDC31HJ-270X	C CAPACITOR	27pF 50V J	R089	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C304	NDC31HJ-270X	C CAPACITOR	27pF 50V J	R090	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C305	NEH71HM-105X	E CAPACITOR	1uF 50V M	R095	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C306	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R096	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C307 C308	NDC31HJ-561X	C CAPACITOR	560pF 50V J 1uF 50V M	R097 R098	NRSA63J-102X NRSA63J-221X	MG RESISTOR	1kΩ 1/16W J 220Ω 1/16W J
C309	NEH71HM-105X NCF31AZ-105X	E CAPACITOR C CAPACITOR	1uF 10V Z	R110	NRSA63J-102X	MG RESISTOR MG RESISTOR	1kΩ 1/16W J
C311	NDC31HJ-150X	C CAPACITOR	15pF 50V J	R111	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C312	NCB31HK-562X	C CAPACITOR	5600pF 50V K	R112	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C313	NCB31HK-333X	C CAPACITOR	0.033uF 50V K	R113	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C314	NCB31HK-333X	C CAPACITOR	0.033uF 50V K	R114	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C315	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	R115	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C319	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R116	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C320	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R124	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C321	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R125	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C322	NEH71HM-335X	E CAPACITOR	3.3uF 50V M	R126	NRSA63J-472X	MG RESISTOR MG RESISTOR	4.7kΩ 1/16W J
C323	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R127	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C324	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R128	NRSA63J-103X		10kΩ 1/16W J
C325	NEH71HM-105X	E CAPACITOR	1uF 50V M	R129	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C329	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R130	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C330	NEH71CM-106X	E CAPACITOR	10uF 16V M	R131	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C331	NCB31HK-682X	C CAPACITOR	6800pF 50V K	R132	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C332	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R133	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C333	NEH71CM-106X	E CAPACITOR	10uF 16V M	R134	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C334	NDC31HJ-561X	C CAPACITOR	560pF 50V J	R135	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
C335	NDC31HJ-561X	C CAPACITOR	560pF 50V J	R136	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C336	NDC31HJ-561X	C CAPACITOR	560pF 50V J	R137	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C901	NEH71CM-106X	E CAPACITOR	10uF 16V M	R138	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C902	NEH71CM-106X	E CAPACITOR	10uF 16V M	R139	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C903	NEH71CM-106X	E CAPACITOR	10uF 16V M	R147	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C904	NEH71CM-106X	E CAPACITOR	10uF 16V M	R151	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
C905	NEH71CM-106X	E CAPACITOR	10uF 16V M	R152	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C906	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R153	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C907	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R154	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C908	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R155	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C909	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	R156	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
C910	NDC31HJ-471X	C CAPACITOR	470pF 50V J	R158	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
C911	NEH71CM-106X	E CAPACITOR C CAPACITOR	10uF 16V M	R165	NRSA63J-103X NRSA63J-223X	MG RESISTOR	10kΩ 1/16W J 22kΩ 1/16W J
C912 C913	NCF31AZ-105X NCF31AZ-105X	C CAPACITOR	1uF 10V Z 1uF 10V Z	R166 R167	NRSA63J-103X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J
C914	NDC31HJ-471X	C CAPACITOR	470pF 50V J	R169	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C915	NEH71CM-106X	E CAPACITOR	10uF 16V M	R170	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C916	NEH71CM-106X	E CAPACITOR	10uF 16V M	R171	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C917	NEH71CM-106X	E CAPACITOR	10uF 16V M	R172	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C918	NEH71CM-106X	E CAPACITOR	10uF 16V M	R173 R174	NRSA63J-103X NRSA63J-221X	MG RESISTOR MG RESISTOR	10kΩ 1/16W J 220Ω 1/16W J
R001	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R177	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R002	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	R201	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
R003	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R202	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
R004	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R203	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
R005	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R204	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R006	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	R205	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R206	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R008	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R207	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R208	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R010	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R209	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R011	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R210	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R012	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	R211	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R013	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R212	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R014	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R213	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R015	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R214	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R016	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R215	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R017	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R216	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R018	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R217	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R019	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R301	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R020	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R302	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R022	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	R303	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R024	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	R304	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R027	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	R305	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

	Part No.	Part Name	Description Local
▲Ref No.  R306 R309 R310 R311 R314 R314 R315 R318 R319 R320 R321 R322 R323 R324 R325 R327 R328 R327 R328 R331 R332 R331 R332 R331 R332 R331 R332 R331 R332 R334 R336 R337 R338 R339 R341 R342 R343 R344 R345	Part No.  NRSA63J-0ROX NRSA63J-0ROX NRSA63J-0ROX NRSA63J-0ROX NRSA63J-683X NRSA63J-71X NRSA63J-102X NRSA63J-102X NRSA63J-102X NRSA63J-332X NRSA63J-332X NRSA63J-103X NRSA63J-103X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-101X NRSA63J-103X NRSA63J-11X NRSA63J-151X NRSA63J-151X	Part Name  MG RESISTOR	Description Local  0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J 68kΩ 1/16W J 470Ω 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 22kΩ 1/16W J 3.3kΩ 1/16W J 3.3kΩ 1/16W J 3.3kΩ 1/16W J 6.8kΩ 1/16W J 6.8kΩ 1/16W J 1kΩ 1/16W J 10kΩ 1/16W J
R345 R346 R347 R348 R349 R350 R351 R352 R353 R354 R355 R356 R357 R358 RA001 RA002 RA003 RA004 RA005 RA006 RA007 RA008	NRSA63J-330X NRSA63J-151X NRSA63J-151X NRSA63J-151X NRSA63J-330X NRSA63J-151X NRSA63J-471X NRSA63J-471X NRSA63J-471X NRSA63J-471X NRSA63J-471X NRSA63J-471X NRSA63J-470X NRSA63J-0ROX NRSA63J-0ROX NRSA63J-0ROX NRSA63J-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX NRZ0040-0ROX	MG RESISTOR MET RESISTOR NET RESISTOR	33Ω 1/16W J 33Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 150Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 470Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J 0Ω 1/16W J x4 0Ω 1/16W J x4
L001 L003 L005 L006 L007 L008 L009 L010 L011 L012 L013 L014 L015 L016 L020 L021 L201 L201 L202 L203 L301 L901 L902 L903 L904	NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-4R7X NQL092K-1R5X NQL092K-1R5X NQL092K-1R5X NQL092K-3R3X NQL092K-3R3X NQL092K-3R3X NQL092K-3R3X NQL092K-3R3X NQL092K-3R3X NQL092K-3R3X NQL094K-100X NQL034K-100X NQL034K-100X NQL034K-100X NQL034K-100X NQL034K-100X NQL034K-100X	P COIL	4.7uH K 4.7uH K 1.5uH K 1.5uH K 1.5uH K 1.5uH K 1.5uH K 1.5uH K 1.5uH K 1.5uH K
K001 K002 K003 LC001 LC002 Y304 Y305 Y901 Y902	NQR0389-003X NQR0389-003X NRSA63J-0R0X NQR0415-003X NQR0415-003X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X NRSA63J-0R0X	FERRITE BEADS FERRITE BEADS MG RESISTOR EMI FILTER EMI FILTER MG RESISTOR MG RESISTOR MG RESISTOR MG RESISTOR	$\begin{array}{c} 0\Omega\ 1/16W\ J\\ 0.47uF\ 16V\ M\\ 0.47uF\ 16V\ M\\ 0\Omega\ 1/16W\ J\\ \end{array}$

ÆRef No.	Part No.	Part Name	Description Local
Y903	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J

# [AV-28H35BUE] REMOTE CONTROL UNIT PARTS LIST (RM-C50-1C)

⚠Ref No.	Part No.	Part Name	Description Local
	2AA030650 2AA027761	BATTERY COVER SLIDE COVER	

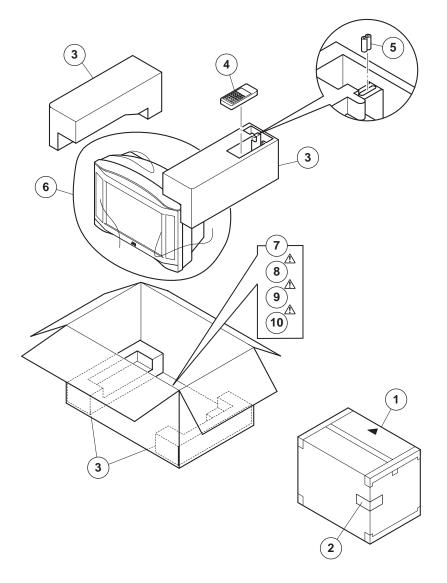
# [AV-28X37SUE / AV-28H35SUE / AV-28X35HUE ] REMOTE CONTROL UNIT PARTS LIST (RM-C54H-1C)

ÆRef No.	Part No.	Part Name	Description Local
	2AA030650 2AA030641	BATTERY COVER SLIDE COVER	

# [AV-28X37HKE] REMOTE CONTROL UNIT PARTS LIST (RM-C55H-1C)

_Ref No.	Part No.	Part Name	Description Local
	2AA030650 2AA030642	BATTERY COVER SLIDE COVER	

# **PACKING**



# **PACKING PARTS LIST**

⚠ Ref	ef.No.	Part No.	Part Name	Description	Local
1 2 2 2 2 2 2 2 2 3 3 3 4 4 4 4 5 5 6 7 8 8 8 8 A A A A A A A A A A A A A A A		AEM1002-B76-E AEM1064-058-E AEM1064-051-E AEM1064-057-E AEM1064-053-E AEM1064-053-E AEM1064-003-E LC11318-003G-U LC11318-003D-U RM-C50-HC RM-C55H-1C RM-C55H-1C RM-C55H-1C	PACKING CASE EURO LABEL EURO LABEL EURO LABEL EURO LABEL EURO LABEL EURO LABEL CUSHION ASSY CUSHION ASSY RC HAND UNIT RC HAND UNIT RC HAND UNIT BATTERY FORM BAG DOCUMENT BAGS INST BOOK	4pcs in 1set 4pcs in 1set 4pcs in 1set  AAA/R03(x2)  English English, German, French, Spanish, Italian, Dutch English, German, French, Spanish, Italian, Dutch English English, German, French, Spanish, Italian, Dutch Danish, Finn, Swedish, Norwegian Danish, Finn, Swedish, Norwegian Danish, Finn, Swedish, Norwegian Russian, Hungarian, Czech, Polish, Romanian Russian, Hungarian, Czech, Polish, Romanian Russian, Hungarian, Czech, Polish, Romanian	H35BUE X35HKE X35HVE X37HIE H35SUE / X37HKE / X37SUE H35BUE / X35HUE H35SUE / X35HKE / X37HIE / X37HKE / X37SUE H35BUE X35HKE / X37HIE / X37HKE H35SUE / X35HUE / X37SUE  X35HKE H35BUE / H35SUE X35HUE X37HIE / X37HKE X37SUE H35SUE H35SUE X35HUE X37SUE